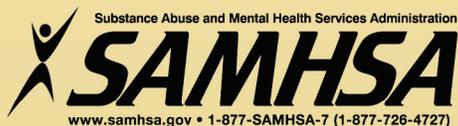


# 2014 Buprenorphine Summit

September 22–23, 2014  
Report of Proceedings



***2014 Buprenorphine Summit***  
***September 22–23, 2014***  
***Report of Proceedings***

**U.S. Department of Health and Human Services**  
Substance Abuse and Mental Health Services Administration  
Center for Substance Abuse Treatment  
Division of Pharmacologic Therapies

1 Choke Cherry Road  
Rockville, MD 20857

## Acknowledgments

This report was prepared for the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment (CSAT), and the National Institute on Drug Abuse (NIDA), U.S. Department of Health and Human Services (HHS), by JBS International, Inc., under contract number HHSS283200700003I/HHSS28342007T. Melinda Campopiano von Klimo, M.D., Medical Officer, Division of Pharmacologic Therapies (DPT), CSAT, SAMHSA, HHS, served as the primary medical advisor, and LCDR Brandon T. Johnson, M.B.A., Regulatory Compliance Officer, DPT, CSAT, SAMHSA, HHS, served as the Contracting Officer's Representative.

Special appreciation is extended to Wilson M. Compton, M.D., M.P.E. (NIDA), H. Westley Clark, M.D., J.D., M.P.H. (SAMHSA), and Elinore McCance-Katz, M.D., Ph.D. (SAMHSA), for their efforts in planning the Summit.

Bonnie Wilford, M.S., and Susan Hayashi, Ph.D., served as the Project Directors, with valuable assistance from Gwen Solan Littman, M.D.; Joseph G. Perpich, M.D., J.D.; Krystyna Isaacs, Ph.D.; and Jeffrey Vender, M.L.I.S., of JBS International, Inc.

The valuable input of the 2014 Summit Steering Committee (see Appendix A) is acknowledged with gratitude.

## Disclaimer

The views, opinions, and content expressed herein are the views of the authors and do not necessarily reflect the official position of SAMHSA, NIDA, or HHS. Nothing in this document constitutes an indirect or direct endorsement by SAMHSA, NIDA, or HHS of any non-federal entity's products, services, or policies and any reference to a non-federal entity's products, services, or policies should not be construed as such. No official support of or endorsement by SAMHSA, NIDA, or HHS for the opinions, resources, and medications described is intended to be or should be inferred. The information presented in this document should not be considered medical advice and is not a substitute for individualized patient or client care and treatment decisions.

## Public Domain Notice

All material appearing in this report except that taken directly from copyrighted sources is in the public domain and may be reproduced or copied without permission from SAMHSA. Citation of the source is appreciated. However, this publication may not be reproduced or distributed for a fee without the specific, written authorization of the Office of Communications, SAMHSA, HHS.

## Originating Office

Division of Pharmacologic Therapies, Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 1 Choke Cherry Road, Rockville, MD 20857.

## CONTENTS

<b>Background</b> .....	<b>1</b>
<b>Key Points on the Five Major Topics</b> .....	<b>2</b>
1. Access to Buprenorphine: Patient Capacity and Quality Care .....	2
2. Access to Buprenorphine: Workforce Considerations .....	4
3. The Role of Provider Training in Improving Access .....	6
4. Buprenorphine for an Opioid Use Disorder in Special Populations .....	9
5. Addressing Health Systems and Reimbursement .....	11
<b>Guest Speakers' Presentations</b> .....	<b>14</b>
Wilson M. Compton—Welcome (Day 1) .....	14
Michael P. Botticelli—Opening Remarks (Day 1) .....	14
Melinda Campopiano von Klimo—Addressing Hurdles and Looking Forward .....	15
Kimberly Jeffries Leonard—Welcome and Opening (Day 2) .....	15
Pamela S. Hyde—Introduction of Senator Carl Levin .....	16
Senator Carl Levin—Remarks .....	16
Elinore McCance-Katz—Closing Remarks .....	17
<b>Summary of Actionable Items</b> .....	<b>17</b>
MAT Needs to Be a First-option Therapy for Patients With OUD .....	17
Ensure High-quality Care Along With Systematic Expansion .....	18
Promote Optimal Models of Care Delivery and Address Barriers to Their Widespread Adoption .....	18
<b>Evaluation</b> .....	<b>19</b>
<b>Appendix A: Summit Steering Committee</b> .....	<b>A</b>
<b>Appendix B: Participants and Observers</b> .....	<b>B</b>
<b>Appendix C: Agendas for General Sessions and Work Groups</b> .....	<b>C</b>
<b>Appendix D: Treatment Models</b> .....	<b>D</b>
<b>Appendix E: Buprenorphine Bibliography</b> .....	<b>E</b>

## BACKGROUND

Buprenorphine received Food and Drug Administration (FDA) approval for use in opioid addiction treatment in October 2002, and as a partial agonist it has some clear advantages over other forms of treatment for opioid addiction. Still, 13 years later, many of those who would benefit from such treatment are not offered buprenorphine as an option. On September 22–23, the 2014 Buprenorphine Summit (Summit), a meeting of expert professionals, was convened by the Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA), in partnership with the National Institute on Drug Abuse (NIDA). The meeting was convened to gather the perspectives of leaders from the field regarding the state of practice and their assessment of possible strategies for moving forward. This Summit presented an opportunity for active and collaborative discussion about caring for patients; designing, operating, and sustaining programs; supporting recovery; and training providers. The participants explored what is known about the adoption of buprenorphine to treat opioid use disorder (OUD), reasons why it has not been as widely prescribed as might have been expected, and ways that federal agencies, medical professionals, and concerned individuals might enable buprenorphine treatment to become more accessible.

The participants in the 2014 Buprenorphine Summit were 32 nonfederal individuals and 37 staff members from 9 federal agencies along with 14 observers: 9 individuals representing medical professional organizations and 5 representatives from 2 pharmaceutical companies. An additional 24 people attended the Summit virtually, as the presentations and general discussion sessions were made available via live WebEx sessions. The virtual participants were invited to submit questions via the messaging system. (See Appendix B for a list of participants and observers, including participants in small work groups.)

The meeting was structured around five major topics:

1. Access to Buprenorphine: Patient Capacity and Quality Care
2. Access to Buprenorphine: Workforce Considerations
3. The Role of Provider Training in Improving Access
4. Buprenorphine for an Opioid Use Disorder in Special Populations
5. Addressing Health Systems and Reimbursement

Multiple speakers addressed each topic in a major presentation session, followed by a 1-hour participant discussion session. On the second day, after the fifth major presentation session, participants and observers broke into small work groups to discuss in more detail the topics addressed in the five major presentation/discussion sessions. Each small group was challenged to identify actionable strategies to achieve specific benefits to assess the scope of problems or the impact of possible solutions. A number of shorter presentations by guest speakers were offered as well. (See Appendix C for the agendas for both general sessions and work groups and Appendix D for treatment models discussed at the Summit.)

Prior to the meeting, participants were provided access to a bibliography of peer-reviewed papers published since 2007 on buprenorphine and buprenorphine treatment, and they were invited to supplement it with other background materials via a password-protected Web-based portal. The bibliography and participant submissions can be found in Appendix E.

These proceedings present a summary of the major points made in the Summit. In-depth Summit discussions of all topics, in both general sessions and work groups, were captured in notes and transcripts that will be used by SAMHSA in future planning.

## KEY POINTS ON THE FIVE MAJOR TOPICS

The guest speakers' presentations, the highlights of the corresponding discussion session, and each work group's report to the general session are summarized below for each of the five topics.

### 1. Access to Buprenorphine: Patient Capacity and Quality Care

#### Presenters

- Miriam Komaromy: *Provider-level Barriers to Buprenorphine Adoption*
- Jinhee J. Lee: *DEA ARCOS Trend Analysis–NTP Buprenorphine Purchases*
- Christopher M. Jones: *Trends in Need Versus Capacity for Opioid Agonist Therapy*

#### Key Points of Presentations

##### Some reasons DATA 2000 waived physicians are not prescribing buprenorphine:

- They have no practice partners who have waivers or can provide cross-coverage because of the interpretation of the patient limit.
- They lack institutional support.
- Their community lacks psychosocial resources for patients.
- They feel that with current patient limits they cannot treat a sufficient volume of patients to meet all the costs of providing buprenorphine given current third-party reimbursement.
- The regulations and scrutiny particular to prescribing buprenorphine make them feel as if they are doing something suspect by prescribing it.
- They are concerned about auditing visits from the Drug Enforcement Administration (DEA).
- Confidentiality rules make it difficult to integrate addiction care with primary care.

##### Strategies to address these concerns:

- Consider patient co-management across disciplines and consultative approaches.
- Increase the number of buprenorphine patients a prescriber is allowed to treat. (A range of possible numbers and stipulations was offered.)

- Educate the boards of directors of treatment programs toward attitudinal change so that more treatment programs will provide buprenorphine and psychosocial services for patients on buprenorphine.
- Identify or work toward development of up-to-date medical management guidelines.
- Urge DEA monitoring through prescription drug monitoring programs (PDMPs) rather than by unannounced auditing visits.
- Provide financial incentives to physicians and clinics offering buprenorphine treatment.
- Explore the feasibility of reducing or eliminating some restrictions on prescribing buprenorphine (e.g., prior authorization, arbitrary limits on dose and treatment duration, limit on number of patients) and enabling advanced practice nurses (APNs) and physician assistants (PAs) to prescribe.
- Consider using professional or career incentives to recruit resident physicians to the area of addiction treatment.
- Improve resident training to include medication-assisted treatment (MAT).
- Train pharmacists to take on more responsibility related to buprenorphine treatment such as medication monitoring and compliance.

**Program models discussed:**

- Project Extension for Community Healthcare Outcomes (ECHO) uses case-based video teleconferencing for mentoring of geographically widespread primary care providers (PCPs) to extend access to treatment to more communities.
- The Baltimore Buprenorphine Initiative model features dissemination of—and connection to—specialty primary care services in particular.
- The BeeHIVE Program at University of California, San Francisco, integrates buprenorphine therapy into a human immunodeficiency virus (HIV) primary care setting.

**Strategies to reduce the risk of buprenorphine diversion and misuse:**

- Utilize a written informed consent and treatment agreement, establishing ground rules and boundaries to guide patient adherence to the treatment plan.
- Write prescription orders that are complete and clear; respond promptly and completely to pharmacists' questions or requests for verification; avoid early refills.
- Prescribe no more than the number of doses needed.

**Key Conclusions of Work Group****Proposed strategies:**

- Identify buprenorphine/naloxone (not monobuprenorphine) as the preferred product.
- Provide standards for prescribing buprenorphine/naloxone to reduce or prevent diversion such as:
  - Patient monitoring by clinicians
  - Effective dosage ranges and schedules
  - Refills
  - Dealing with lost medication or prescriptions.

- Increase the amount of reimbursement health professionals receive for providing MAT with buprenorphine.
- Look at residencies and get residency review committees involved; trained preceptors are needed to model behavior.
- Decrease or discontinue in-person, or especially unannounced, audits by the DEA.
- Develop guidance on the use of telemedicine in MAT with buprenorphine, perhaps with a role for APNs or PAs.
- Consider the Massachusetts Nurse Care Management (NCM) model for enhancing infrastructure (providing a paid, embedded, full-time staff person for every 50 patients) as a replicable strategy to expand access to buprenorphine.
- Consider the Vermont hub-and-spoke model (centers of excellence conduct patient assessment and induction, get them stabilized, and then identify dispensing stations for maintenance) as a possibly replicable model to expand access to buprenorphine.

**Needs identified:**

- Provide quality metrics and structures for monitoring care that include:
  - Urine toxicology screens
  - Informed consent forms
  - Use of the PDMP
  - Use of referral systems.
- Develop continuing medical education (CME) credits.
- Obtain knowledge and data about diversion of various formulations or dosages relative to one another.
- Review and consider revising DATA 2000 to reflect the current practice environment. Opioid use has reached the level of national crisis since DATA 2000 was enacted, and APNs and PAs have become a larger, more widely accepted, and more available part of the healthcare workforce.

## 2. Access to Buprenorphine: Workforce Considerations

### Presenters

- Colleen LaBelle: *Integrated Approach to Treatment Expansion*
- Wayne Wakeland: *Buprenorphine Treatment Capacity: A Descriptive Agent-based Model*

### Key Points of Presentations

**Strategies for an integrated approach to treatment expansion:**

- Use APNs and PAs rather than registered nurses (RNs) for in-office support services for patients on buprenorphine. APN and PA services can be billed to Medicaid.
- Consider requiring training on addiction and MAT for licensure of nurses, APNs, substance abuse counselors, certified alcoholism and drug abuse counselors, and mental health providers.

- Increase collaborative partnerships across disciplines in the delivery of buprenorphine treatment.
- Consider using Treatment Research Institute-developed medical school curriculum online, now being used by 134 medical schools around the country, or a similar resource.

**Program models discussed:**

- Massachusetts NCM model: RNs with 1 day of training support physicians by performing patient education and following treatment protocols (e.g., urine drug testing, pill counts, perioperative management); ensuring compliance with federal laws (e.g., confidentiality, record keeping); coordinating care with other physicians, pharmacists, and offsite counseling services; handling drop-in hours for urgent issues; and addressing all insurance issues (e.g., prior authorizations).
- Stanley Street Treatment and Resources (SSTAR), Fall River, Massachusetts: Patients initially see physicians, then return weekly for 12 weeks to meet with the doctor and/or with a nurse; medical team meets biweekly to go over cases; money made by billing for nurse visits offsets money lost billing for counseling.
- Hub-and-spoke model in Vermont: See description on page 4.
- Federally qualified health centers (FQHCs): Structure allows sustainable reimbursement—enhanced Medicaid reimbursement with NCM model and Medicare deductibles waived.

**Buprenorphine treatment capacity:**

- Based on the number of DATA 2000 waived physicians, there is capacity to treat 1.4 million people. If fully realized, the potential exists for many more people to receive treatment. This could far exceed the number of people currently receiving MAT in opioid treatment programs (OTPs).
- Factors favoring access to buprenorphine for OUD treatment:
  - It can be prescribed in office-based settings and dispensed at any licensed pharmacy.
  - Medicaid and private insurance funding for buprenorphine/naloxone should be increasingly available because of the Affordable Care Act (ACA) and parity legislation.
- Factors limiting access to buprenorphine:
  - The current actual capacity to provide OUD treatment is not adequate to meet the need for treatment.
  - An individual physician is limited in the number of patients he or she can treat.
  - Prescribing buprenorphine as a part of MAT involves more management and care coordination than most primary care physicians have available.
  - Many physicians refrain from providing buprenorphine treatment because of fear of possibly disruptive inspections or audits by DEA agents.
  - Many physicians do not provide buprenorphine because the patient caps limit options for patient coverage during physician absence or illness.

- Only physicians can prescribe buprenorphine for OUD treatment.

## Key Conclusions of Work Group

### Strategies to expand availability of buprenorphine treatment for OUD:

- Examine elimination of restrictions on prescribing buprenorphine:
  - Enable APNs and PAs to prescribe it.
  - Raise the cap on how many patients a physician can have in treatment at a time.
  - Allow physicians to cross-cover one another's patients on a short-term basis without being in violation of the patient limit; the practice of courtesy cross-coverage is standard across medicine.
- Work with state Medicaid programs to remove current barriers to prescribing:
  - Provide reimbursement for providers adequate to fully offset costs.
  - Remove arbitrary limits on dosage and time in treatment, prior authorization, "fail first" requirements, and mandatory counseling attached to buprenorphine therapy.
  - Reimburse for time spent and service provided via telehealth.
  - Reimburse for NCM programs.
- Encourage care management in the form of cross-agency care coordination (Missouri system).

## 3. The Role of Provider Training in Improving Access

### Presenters

- Andrew J. Saxon: *Impact of Current Training Requirements*
- Stephen Wyatt: *Training in Support of Adoption and Implementation*

### Key Points of Presentations

#### DATA 2000 waived physicians' main barriers to prescribing:

- Lack of psychosocial support
- Time constraints
- Lack of confidence
- Lack of specialty backup
- Resistance from practice partners

#### Strategies to address these barriers:

- Embed addiction/mental health personnel to help handle logistics, provide some of the counseling, and create an adequate reimbursement model.
- Offer professional support via Providers' Clinical Support System (PCSS) or similar education/mentoring resource.
- Encourage and expand telemedicine.
- Work with DEA to destigmatize buprenorphine prescribing for providers.

**Current training course for physicians:**

- Goal: Inform physicians on the safe and appropriate clinical use of buprenorphine and on the resources needed to set up office-based opioid agonist treatment (OBOT) using it.
- Nine training topics: Cover over 8 hours of training.
- Formats: Lectures and small groups can be face-to-face, self-training, or a combination.
- Key evaluation finding: Training must help prescribers develop the skills and confidence needed to manage patients with substance use disorder (SUD).

**Strategies to support provider buprenorphine training to improve access to care:**

- Expand outreach to providers through a coordinated effort of SAMHSA and PCSS-MAT or similar partnership.
- Promote ongoing continuing professional education with standard evidence-based interventions and strategies for successful buprenorphine treatment.
- Provide new, expanded funding for improved CME activities and required buprenorphine training.
- Consider new options for promoting interest and willingness to engage in training and provide buprenorphine treatment.
- Fund Coalition on Physician Education in Substance Use Disorders or similar organization to develop a unified curriculum standard for medical school education in addiction medicine or promote the adoption high-quality existing curricula.
- Increase the number of addiction specialty fellowships available.
- Address difficulties with being credentialed at a hospital if a provider wants to use a DATA 2000 waiver and other institutional barriers.
- Consider requiring ongoing training to maintain DATA 2000 waiver.
- Encourage state medical boards to use Federation of State Medical Boards (FSMB) revised OBOT guidelines released in April 2013.
- Increase public awareness and understanding of buprenorphine treatment to promote acceptance and reduce barriers.
- Enable APNs and PAs to become prescribers or provide some meaningful, billable function related to buprenorphine treatment that is linked to expanding the prescriber capacity.
- Promote culture change in healthcare institutions regarding their responsibilities and roles in addressing public health priorities.
- Help consumers and their support systems make their voices heard to promote greater access to care.

**Training model discussed:**

- Course on Addiction and Recovery Education (CARE) at MedU (an online medical education program)

**Treatment guideline models discussed:**

- FSMB's 2013 Model Policy on the Use of Opioid Analgesics in the Treatment of Chronic Pain
- New MAT guidelines to be issued by the American Society of Addiction Medicine (ASAM) (anticipated release in Spring 2015)
- Vermont's buprenorphine office-based treatment guidelines that are updated every 2 years and are moving OTPs toward meeting National Committee for Quality Assurance specialty standards

**Specific strategies to improve quality of medical school and postgraduate curricula:**

- Physician education should ensure that students work with physicians who champion treatment for OUD and/or participate in treating a patient with buprenorphine.
- SAMHSA and other federal agencies could partner with medical education authorities and medical school deans to better align curricula with the unmet public health need for addiction prevention and treatment.
- The Centers for Medicare and Medicaid Services' (CMS) investment in graduate medical education can leverage redesign of curricula to reward desired outcomes, competencies, and program performance specifically as they pertain to addiction treatment.
- SAMHSA and other federal agencies could partner with young doctors through trainee and student organizations (e.g., Doctors for America, the American Medical Student Association, house staff organizations) to counter stigma about addiction, reinforce physicians' responsibility to treat all patients in need, and promote use of effective OUD treatments.

**Key Conclusions of Work Group****Strategies to support provider training to improve access:**

- Work with the National Governors Association (NGA) or Governor's Institute on Substance Abuse; ask governors to leverage influence with state medical schools to revise the curricula.
- Look at creating specific training pathways leading to DATA 2000 waivers for physicians based on stage of training/career, specialty, practice environment, etc.; a PCSS group is looking at this.
- Obtain reimbursement for peer support or case management.
- Increase educational opportunities and resources for nonphysician stakeholders, especially pharmacists.
- Consider whether state-required CME to maintain licensure should be recommended to include training in MAT.
- Examine how physicians are trained for MAT with methadone for lessons learned.
- Explore adaptation of FDA Risk Evaluation and Mitigation Strategy programs to include training in MAT.
- Consider incentivizing training, perhaps by tying it to licensing of FQHCs or certification of the medical home or requiring it of OTP directors.

- Encourage adoption of FSMB buprenorphine guidelines for opioid prescribing passed at the state level.
- Increase acceptance of MAT as a standard first option for opioid dependence treatment via short, specific educational messages (e.g., created with SAMHSA or NIDA support) to be delivered over the American Medical Association Wire and to Association of Medical Colleges, American Pharmacy Association, and American Society of Health Systems Pharmacists lists or similar communication portals for health professionals.

**Further needs identified:**

- Profiles (potentially by SAMHSA) of successful, reproducible models of delivering buprenorphine treatment
- Specific formal trainings on implementation of buprenorphine treatment including developing a business plan, setting up an office, and meeting federal or other requirements
- Evaluation of current training practices to find out why physicians are not activating their DATA 2000 waivers and who is signing up for what kind of training

## **4. Buprenorphine for an Opioid Use Disorder in Special Populations**

### **Presenters**

- Robert Schwartz: *Buprenorphine Treatment in the Criminal Justice System*
- Michelle Lofwall: *The State of Practice for Special Populations*

### **Key Points of Presentations**

**Findings from five studies on buprenorphine treatment in the criminal justice system:**

- Buprenorphine can be used for detoxification in jails or prisons.
- Initiating buprenorphine maintenance has potential as a prerelease strategy for reentering inmates to reduce recidivism, relapse, and death from overdose.
- Close observation of buprenorphine dosage and linkage to follow-up are required to prevent diversion and optimize outcomes.
- Buprenorphine treatment is as effective for individuals on parole or probation as it is for those not under legal supervision.

**Issues related to buprenorphine treatment in the criminal justice system:**

- Close observation is required to prevent diversion in prison settings.
- For many medical conditions, inmates are discharged from prison on medication, but for addiction, individuals are discharged without pharmacotherapy for this condition.
- Close coordination is needed between the medical and public health community and the criminal justice system so that understanding and acceptance of MAT can be increased and outcomes for patients can be improved.

- The gap in insurance coverage between release from detention and restoration of Medicaid needs to be eliminated.
- The companies that run U.S. prisons and those contracted to provide medical treatment to prisoners should partner with government agencies and other stakeholders to develop and implement MAT to reduce recidivism.
- Litigation on parity can be expected to impact the availability of MAT in correctional settings.

**The state of practice for special populations:**

- Special populations have characteristics related to age, environment, current medical conditions, or current pharmacotherapies complicating substance use. These characteristics produce potential treatment challenges and/or unique treatment needs.
- Treatment access means getting quality individualized treatment to the patients who need treatment where and when they need it and being able to adjust the level of care as appropriate.
- Multiple factors can impact the likelihood that special populations will receive successful treatment such as:
  - Access to telehealth and mobile treatment
  - Parity and adequate provider reimbursement
  - Increased use of collaborative care models such as by involving pharmacies
  - Continuous adjustment of care to meet increased, decreased, or changing needs
  - Treatment guidelines and expectations that can be tempered by flexibility and are based on clinical judgment and experience level
  - Improved education for students in healthcare professions.

**Strategies suggested:**

- Standardize and promote telemedicine.
- Promote MAT for women dependent on opioids to improve pregnancy outcomes.
- Review evidence regarding use of buprenorphine/naloxone in pregnant women.
- Provide guidance in addressing co-occurring disorders.
- Compel parity in access to and treatment with MAT.

**Key Conclusions of Work Group****Strategies suggested for treatment in special populations (including criminal justice):**

- Use a patient-centered approach that allows flexibility in scheduling counseling and office appointments.
- Educate drug court judges, criminal justice system workers, and human services personnel about addiction and MAT.
- Encourage a collaborative and coordinated approach to caring for patients who require specialized treatment or experience social inequities or cultural differences.
- Train and encourage physicians and medical students throughout medical specialties to accept responsibility to care for patients with OUD and any other SUD.

- Decrease burden of treatment for special populations by eliminating barriers imposed by payers (e.g., fail-first, prior authorization) and mandated practices (e.g., specific types, schedules, amounts of behavioral interventions).
- Develop patient-centered models specific to special populations.
- Provide community education about SUD and MAT, such as is done via BeeHIVE or other existing community education and treatment programs.

## 5. Addressing Health Systems and Reimbursement

### Presenters

- Kimberly Jeffries Leonard: *Affordable Care Act and Mental Health Parity: The Playing Field*
- C. Rolly Sullivan: *Effective Care Delivery*

### Key Points of Presentations

#### ACA and Mental Health Parity and Addiction Equity Act (MHPAEA):

- These two acts, in early implementation, are transforming practice and reimbursement for OUD treatment and buprenorphine MAT:
  - State-selected Medicaid expansion and marketplace exchange plans are extending new insurance coverage to millions of Americans.
  - Medicaid expansion mandates new and/or improved benefits for treatment of OUD, including medically necessary buprenorphine; many people who need buprenorphine-based MAT but could not previously afford it may now seek it.
- ACA framework includes:
  - Ten essential health benefits and MHPAEA
  - Expanded insurance coverage and treatment options in primary care as well as specialty settings
  - Incentives for integrated, comprehensive care
  - Improved reimbursement policies based on quality of care and client outcomes, not fee-for-service parameters
  - Pain-related measures and support.
- Physicians will soon face restructuring of compensation and reimbursement policies that include:
  - New payment options for OUD treatment in primary care and specialty settings
  - Financial incentives for integrated care
  - Reimbursement linked to quality of care and outcome measures rather than fee-for-service-based formulas.
- Health systems should be prepared to:
  - Develop a more comprehensive and integrated healthcare delivery environment, which includes routine SUD screening and treatment

- Be aware of the pain–OUD connection and well informed of the best practices in pain management
- Offer a multidisciplinary, interprofessional team approach not only to enhance patient outcomes but also to decrease the administrative overhead and compliance burden and to share resources, infrastructure, and networking capabilities
- Expand clinical support systems, interoperable electronic health records, and other health information technology
- Directly address SUD to improve client outcomes, reduce unnecessary and/or suboptimal service use, and address competing treatment priorities and contraindications (results that can help shape reimbursement policies by removing arbitrary barriers to buprenorphine MAT reimbursement).

**Buprenorphine clinic of West Virginia University—a clinical model of integrated care:**

- Guiding principles of the clinic, based in the Department of Psychiatry, include:
  - Medication alone is not enough.
  - All patients need medical and psychoeducational treatment, so these visits should always be tied together:
    - Medical group (30 minutes)
    - Psychoeducational group (60 minutes)
    - Random urine drug screen onsite that includes buprenorphine
    - 12-step meeting list review
  - Structure should be provided, being mindful of cost/reimbursement.
  - Attendance at outside 12-step programs should be required.
  - Goal is abstinence from alcohol and drugs.
- Patient visit schedule is adjusted according to time in treatment and response to interventions.
- Clinic activities include:
  - Intakes are done by social work faculty, staff, and students; buprenorphine is given at intake if possible.
  - Forty groups per week provide both medication and psychoeducation (basic, intermediate, and advanced levels per patient needs).
  - Pregnancy clinic serves 35 women.
  - Three telemedicine buprenorphine clinics per week operate for patients located in remote sites.
  - Case manager is essential to track details in managing 400 patients.
- Sustainable reimbursement model:
  - Sufficient reimbursement achieved by billing for individual physician office visits (for each group member), for each individual in behavioral group therapy, and for individual urine drug screens
  - Basic psychiatric codes used to bill for these services

**Needs and other issues identified in large group discussion:**

- Some physicians are facing annual limits on urine drug screening/testing set by insurance companies.
- Some SAMHSA National Outcome Measures need to be revised for MAT, particularly those related to discharge.
- MAT-specific National Quality Forum measures are needed.
- Funding by CMS or other federal sources should not pay for non-evidence-informed care.
- Healthcare Common Procedure Coding System codes are needed to bill for buprenorphine services (distinct from those for methadone).
- Specialists certified by American Board of Addiction Medicine need codes to be able to bill for their addiction treatment services.
- A time and motion study and a practice survey need to be conducted to increase reimbursement for current procedural terminology codes related to addiction medicine services.
- Policymakers, professional organizations, and other stakeholders should develop and cultivate direct relationships with state Medicaid directors and/or governors who can help improve behavioral and addiction medicine benefits under the ACA, including modifications to include payment for treatment of OUD as a chronic medical condition.
- Commercial insurance companies could incentivize patients to seek buprenorphine MAT for opioid addiction similar to how they have incentivized quitting smoking and reducing weight.
- Healthcare providers and provider organizations should promote SAMHSA's prescriber clinical support systems, [www.opioidprescribing.com](http://www.opioidprescribing.com), NIDAMED, and other high-quality training and educational resources.

**Key Conclusions of Work Group****Strategies to address health systems and reimbursement:**

- Conduct a media campaign (SAMHSA, Centers for Disease Control and Prevention, and other federal partners) promoting the message that opioid addiction is a public health crisis and that it is a treatable disease.
- Partner with private organizations to promote MAT and public health messaging.
- Encourage U.S. Department of Health and Human Services (HHS), CMS, and other federal agencies to meet with others in high-level, decision-making roles (including the National Association of State Medical Directors, the National Association of Insurance Commissioners) to promote the understanding that the standard of care for opioid addiction is MAT.
- Encourage participation from patients, their families, and communities.
- Involve resident physician and student organizations (e.g., Doctors for America) and house staff organizations at hospitals (e.g., house staff council).
- Address the needs identified in the large group discussion, summarized earlier in this report.

---

## GUEST SPEAKERS' PRESENTATIONS

The information and perspectives presented by these speakers helped to set the tone of the event and complemented and supplemented the presentations on the five major topics in the agenda. Key points made in their presentations are summarized below.

### **Wilson M. Compton—Welcome (Day 1)**

Dr. Compton, Deputy Director of NIDA, opened the Summit on Day 1 with a review of the crisis in access to treatment for opioid addiction in this country and the need for specific plans to reduce the morbidity and mortality associated with opioid addiction.

#### **Purpose of this Summit:**

- There is a crisis in access to treatment for opioid addiction in the United States.
- We have developed effective treatments, but why aren't they more widely used, and why is there bias within the treatment system against MAT?
- The goal of this Summit is to address these issues and identify strategies to reduce the morbidity and mortality associated with opioid addiction.

### **Michael P. Botticelli—Opening Remarks (Day 1)**

Mr. Botticelli, Acting Director, Office of National Drug Control Policy (ONDCP), gave opening remarks detailing the four pillars of the 2011 ONDCP prescription drug abuse plan, followed by a reminder that the FQHCs and health centers within the U.S. Departments of Defense and Veterans Affairs offer rich opportunities for integration of care. He emphasized the need to make MAT the standard of care and to identify models of care that use MAT in primary care settings.

#### **The four pillars of the 2011 ONDCP prescription drug abuse plan:**

- Education, including improved education for physicians about safe prescribing
- Monitoring, through PDMPs in every state that can share data
- Proper disposal of unused drugs
- Enforcement, to reduce the prevalence of pill mills and doctor shopping and to reduce diversion

#### **Why this Summit:**

- Overdoses driven by prescription drug abuse are now the number one cause of unintentional death, and heroin-related deaths have increased as well.
- Patients with OUD can be successfully treated with MAT using buprenorphine and other medications approved by FDA.
- ONDCP has convened federal agency representatives to review government programs, policies, and administrative authorities; identify barriers to MAT; explore ways to increase MAT for OUDs; and coordinate federal agencies' efforts. Some states (e.g., Massachusetts, Vermont, West Virginia) have also sought to expand access to MAT.

- Nationwide, primary care centers—including FQHCs and health centers within the U.S. Departments of Defense and Veterans Affairs—offer very rich opportunities for integration of SUD treatment, particularly MAT.
- We need to look at how we use primary care infrastructure for not only SUD treatment but particularly MAT and identify models around the country.

## **Melinda Campopiano von Klimo—Addressing Hurdles and Looking Forward**

The meeting was opened and its purpose described by Dr. Campopiano von Klimo.

### **Opening Remarks:**

- Those seated around the table were invited specifically for their expertise and experience; seated in the back are representatives of federal agencies and partner organizations (the latter thanked for taking a back seat temporarily).
- We must not get bogged down in considering existing policies. Rather, we are here to talk about strategies and solutions that work in caring for patients; designing, operating, and sustaining programs; supporting recovery; training providers; promoting the adoption of buprenorphine; and ensuring the safety of the public.

## **Kimberly Jeffries Leonard—Welcome and Opening (Day 2)**

On Day 2, Dr. Leonard, Deputy Director of CSAT, SAMHSA, reviewed the discussions held on Day 1 and encouraged the participants to identify actionable items for future development.

### **On Day 1, participants considered and discussed many things:**

- The need for ongoing education for physicians, residents, and other healthcare providers
- The need for prescribers to obtain and use DATA 2000 waivers to bring vital MAT to those in need
- Ways that we as members of a professional community must address barriers to the establishment and integration of buprenorphine treatment services
- Interprofessionalism and team-based approaches to practice and to education
- Models of buprenorphine prescribing and financial viability, particularly Vermont's hub-and-spoke model, ECHO's telehealth model in New Mexico, and a nurse-managed FQHC model in Massachusetts
- Agent-based modeling and its utility in studying variables and influencing capacity and quality of care through statistical analysis

### **On Day 2's agenda:**

- Discuss the ACA and parity.
- Explore a clinical model of integrated care in place in West Virginia.
- Hear from SAMHSA Administrator Pamela Hyde and Senator Carl Levin.
- Continue dynamic and productive discussions collectively and in small work groups.

**Participants and federal agencies work in partnership:**

- Participants' energy and commitment throughout this Summit have been inspiring, and SAMHSA and its federal partners rely on participants' experience, insights, and recommendations to inform programs and policies.
- SAMHSA looks forward to continuing to work with participants to translate a shared vision into reality.

**Pamela S. Hyde—Introduction of Senator Carl Levin**

SAMHSA Administrator Pamela S. Hyde introduced Senator Carl Levin, documenting his years of devotion to the issue of opioid treatment.

**Distinguished longtime public servant:**

- First elected to the U.S. Senate in 1978; chairs the Senate Committee on Armed Services, the Permanent Subcommittee on Investigations, and Governmental Affairs Committee
- Over two decades has supported efforts to develop more effective means of combating drug abuse and addiction and ensuring access to care for those struggling with SUDs

**Strong advocate for MAT with buprenorphine for people with OUD:**

- Coauthored DATA 2000, which permits buprenorphine to be prescribed in physicians' offices
- Cosponsored 2006 amendment to DATA 2000 that made further changes enabling office-based prescribing
- Continues to examine these issues and consider how to effect wider adoption
- Has decided to retire in 2015

**Senator Carl Levin—Remarks**

After briefly reviewing his vision for buprenorphine treatment in the future, Senator Levin shared with the group a checklist of items that he would like to see addressed in the short term.

**Perspective to share at the end of his Senate career:**

- Despite the ongoing OUD epidemic, of the 625,000 physicians in the country, only 25,000 have a DATA 2000 waiver; only about 2 percent, or 4 percent of U.S. primary care physicians, and less than a third of the addiction physicians are certified.
- Advocates for MAT using buprenorphine (e.g., those here) need to triple their efforts.

**Checklist of what Senator Levin believes needs to be done to expand access to buprenorphine/naloxone and increase the number of certified physicians:**

- Optimize availability under the ACA.
- End the 100-patient limit, either administratively (by regulations) or by legislation.
- Involve all 1,300 community health centers, operating at more than 9,200 service delivery sites.

- Involve medical schools.
- Utilize telemedicine.
- Allow trained nurse practitioners to prescribe.
- Involve the National Health Service Corps.
- Attack bureaucratic hurdles.
- Educate DEA.
- Involve the NGA.
- Inform drug courts.
- Support a White House forum.

## **Elinore McCance-Katz—Closing Remarks**

Dr. McCance-Katz, Chief Medical Officer, SAMHSA, closed the Summit by thanking all Summit Steering Committee members and the Summit participants and sharing her expectations about future developments.

### **Thanks and next steps:**

- Thanks to participants for contributing time and energy to make this a dynamic, productive Summit.
- Thanks to Steering Committee, NIDA, and all planners.
- Proceedings will be available for use by all here and federal officials considering policy decisions in this area.
- SAMHSA hopes to draw further on work groups' expertise in the future and provide resources to the field with regard to adoption and implementation of MAT with buprenorphine.

# **SUMMARY OF ACTIONABLE ITEMS**

## **MAT Needs to Be a First-option Therapy for Patients With OUD**

- Recommend that MAT be offered at all FQHCs and Community Mental Health Centers and that SUD treatment programs offer some form of MAT as a requirement to receive federal or state dollars via grants or contracts.
- Work with CMS and state Medicaid directors to improve Medicaid coverage and reimbursement options including full adoption of existing OUD-related codes and the development of additional billing codes where needed (e.g., in OTPs).
- Expand and make reimbursable telemedicine for both the delivery of expert consultation and the treating professional's time spent in clinical consultation for complex cases.
- Develop a media campaign with SAMHSA and NIDA to promote MAT as the standard of care for opioid treatment and address bias against the disease of addiction and MAT.
- Use federal and professional organization channels to disseminate the message; include consumers as well as policymakers in developing the campaign.

## **Ensure High-quality Care Along With Systematic Expansion**

- Promote buprenorphine in combination with naloxone as the preferred formulation, with a limited role for the buprenorphine monoprodukt.
- Provide guidance to the field about the range of possible effective doses, and the lack of evidence for added benefit of more than 24 mg daily, to reduce habitual overprescribing that may be fueling diversion.
- Reduce diversion via the use of prescription drug monitoring or other health information exchanges and rely less on DEA inspections.
- Consider how to customize DATA 2000 waiver training for specific subsets of prescribers (e.g., psychiatrists, internists, family physicians) to increase the likelihood that providers will ultimately make use of their waivers.
- Conduct an evaluation of current training systems and barriers to adoption to determine why so few physicians request DATA 2000 waivers or fail to use them fully or at all.
- Improve knowledge and skill acquisition about substance use in general and MAT in particular across the professional life span of healthcare providers beginning with pre-professional education, and continuing through professional school, clinical training, and continuing professional education.
- Partner with professional societies and organizations. CMS, which pays for resident physician training, could play an important role in such a process.

## **Promote Optimal Models of Care Delivery and Address Barriers to Their Widespread Adoption**

- Produce a detailed review of current proven models of care delivery, with accompanying business plans, published in a report or paper as an outcome of this Summit.
- Evaluate DATA 2000 and other regulations or requirements imposed on buprenorphine by insurers, government entities, and others for (1) effectiveness in achieving their intended purpose, such as safe and appropriate prescribing and the health and safety of the public, (2) unintended negative impact on prescriber willingness to provide buprenorphine treatment, or (3) access to treatment for persons with OUD.
- Look for areas where adverse consequences may be unintended such as interpreting the patient limit to encompass short-term, cross-coverage arrangements.
- Make an organized effort to enhance the understanding and acceptance of MAT by criminal justice and law enforcement agencies such as DEA and drug courts.

## EVALUATION

Summit participants left the meeting encouraged about the prospects for advancing and expanding buprenorphine treatment. The majority of survey respondents were very satisfied or satisfied with the choice of meeting topics and logistics. Respondents particularly enjoyed the opportunities to network and discuss issues, but would have appreciated even more time working in small groups, more diverse representation among the invited guests and speakers, and more patient involvement at the sessions.

# **APPENDIX A: SUMMIT STEERING COMMITTEE**

**SUMMIT STEERING COMMITTEE**

- Anton C. Bizzell, M.D., President, The Bizzell Group, LLC
- Maureen Boyle, Ph.D., Science Policy Branch, NIDA/National Institutes of Health (NIH)
- Melinda Campopiano von Klimo, M.D., CSAT/SAMHSA
- Jessica Cotto, M.P.H., Office of Science Policy and Communications, NIDA/NIH
- Yvonne Davis, M.P.H, Indian Health Service/HHS
- Marc Fishman, M.D., Maryland Treatment Centers
- Sidney Hairston, CSAT/SAMHSA
- Pamela Horn, M.D., FDA/HHS
- LCDR Brandon T. Johnson, M.B.A., CSAT/SAMHSA
- Daniel Kivlahan, Ph.D., Addictive Disorders Mental Health Services, Veterans Health Administration
- Margaret Kotz, D.O., Addiction Recovery Services, University Hospitals of Cleveland, Case Medical Center
- Robert Lubran, M.S., M.P.A., CSAT/SAMHSA
- Laura Makaroff, D.O., Office of Quality and Data, Health Resources and Services Administration (HRSA)/HHS
- Marcella Ronyak, Indian Health Service/HHS
- June S. Sivilli, M.A., ONDCP/Executive Office of the President (EOP)
- Ben Wheat, M.D., Federal Bureau of Prisons

## **APPENDIX B: PARTICIPANTS AND OBSERVERS**

---

**PARTICIPANTS****Brian Altman, J.D.**

SAMHSA/HHS  
Rockville, MD

**Jeffrey Baxter, M.D.**

University of Massachusetts Medical School  
Shrewsbury, MA

**Michael P. Botticelli, M.Ed.**

ONDCP/EOP  
Washington, DC

**Maureen Boyle, Ph.D.**

NIDA/NIH  
Bethesda, MD

**R. Douglas Bruce, M.D., M.A., M.S.**

Cornell Scott Hill Health Center  
New Haven, CT

**Anthony Campbell, R.Ph., D.O.**

CDR, U.S. Public Health Service Commissioned  
Corps  
CSAT/SAMHSA  
Rockville, MD

**Melinda Campopiano von Klimo, M.D.**

CSAT/SAMHSA  
Rockville, MD

**Mady Chalk, Ph.D., M.S.W.**

Treatment Research Institute  
Philadelphia, PA

**Margaret Chisolm, M.D.**

Johns Hopkins University School of Medicine  
Baltimore, MD

**H. Westley Clark, M.D., J.D., M.P.H., CAS**

CSAT/SAMHSA  
Rockville, MD

**Kelly J. Clark, M.D., M.B.A.**

Virginia Tech Carilion School of Medicine  
Louisville, KY

**Wilson M. Compton, M.D., M.P.E.**

NIDA/NIH  
Bethesda, MD

**Scott M. Davis, M.D., M.A., F.A.S.A.M.**

Above It All Treatment Center  
Northridge, CA

**Steven Dettwyler, Ph.D.**

Delaware Health and Social Services  
New Castle, DE

**Joel M. Dubenitz, Ph.D.**

Division of Behavioral Health and Intellectual  
Disabilities Policy/HHS  
Washington, DC

**Jannette Dupuy, Ph.D.**

HRSA/HHS  
Rockville, MD

**Charles T. Ellis, M.D.**

Helena, MT

**Jennifer Fan, Pharm.D., J.D.**

Center for Substance Abuse Prevention/SAMHSA  
Rockville, MD

**James Finch, M.D.**

Governor's Institute on Substance Abuse  
Durham, NC

**Marc Fishman, M.D.**

Maryland Treatment Centers  
Baltimore, MD

**Mary Fleming, M.A.**

SAMHSA/HHS  
Rockville, MD

**Anthony Folland, M.D.**

Vermont Department of Health  
Burlington, VT

**Adam Gordon, M.D., M.P.H., F.A.C.P., F.A.S.A.M.**

University of Pittsburgh  
Pittsburgh, PA

**Sidney Hairston**

LCDR, Commissioned Corps  
CSAT/SAMHSA  
Rockville, MD

**Daniel Hindman, M.D.**

Johns Hopkins University School of Medicine  
Baltimore, MD

**Pamela Horn, M.D.**

FDA/HHS  
Silver Spring, MD

**Joshua Hunt, Pharm.D.**

FDA/HHS  
Silver Spring, MD

**Pamela S. Hyde, J.D.**

SAMHSA/HHS  
Rockville, MD

**Brandon T. Johnson, M.B.A.**

LCDR, Commissioned Corps  
CSAT/SAMHSA  
Rockville, MD

**Christopher M. Jones, Pharm.D., M.P.H.**

CDR, Commissioned Corps  
FDA/HHS  
Silver Spring, MD

**Michael Klein, Ph.D.**

FDA/HHS  
Silver Spring, MD

**Miriam Komaromy, M.D.**

University of New Mexico  
Albuquerque, NM

**Todd Korthuis, M.D., M.P.H.**

Oregon Health & Science University  
Portland, OR

**Margaret Kotz, D.O.**

University Hospitals of Cleveland, CMC  
Cleveland, OH

**Mark Kraus, M.D.**

Westside Medical Group  
Waterbury, CT

**Colleen LaBelle, R.N., C.A.R.N.**

Boston Medical Center  
Hanover, MA

**Jinhee J. Lee, Pharm.D.**

CAPT, Commissioned Corps  
CSAT/SAMHSA  
Rockville, MD

**Kimberly Jeffries Leonard, Ph.D.**

CSAT/SAMHSA  
Rockville, MD

**Senator Carl Levin, J.D.**

United States Senate  
Washington, DC

**Frances R. Levin, M.D.**

Columbia University  
New York, NY

**Sharon Levy, M.D., M.P.H.**

Boston Children's Hospital  
Boston, MA

**Michelle Lofwall, M.D.**

University of Kentucky College of Medicine  
Lexington, KY

**Robert Lubran, M.S., M.P.A.**

CSAT/SAMHSA  
Rockville, MD

**Elinore McCance-Katz, M.D., Ph.D.**

SAMHSA/HHS  
Rockville, MD

**Mark A. McGrail, M.D.**

COL, Medical Corps US Army, Director, Primary Care  
Services  
Office of the Surgeon General  
Falls Church, VA

**Reema Mehta, Pharm.D., M.P.H.**

FDA/HHS  
Silver Spring, MD

**Marjorie Meyer, M.D., F.A.C.O.G.**

University of Vermont  
Burlington, VT

**David K. Mineta, M.S.W.**

ONDCP/EOP  
Washington, DC

**Todd Molfenter, Ph.D.**

University of Wisconsin–Madison  
Madison, WI

**Alexandra Nielsen, M.S.**

Portland State University  
Beaverton, OR

**Alicia Swenson O'Brien, L.C.S.W.**

HRSA/HHS  
Rockville, MD

**Yngvild Olsen, M.D.**

Institutes for Behavior Resources/REACH Health  
Services  
Baltimore, MD

**Patricia Pade, M.D.**

University of Colorado School of Medicine  
Aurora, CO

**Nancy E. Paull, M.S., L.A.D.C.**

Stanley Street Treatment and Resources  
Fall River, MA

**Susan Robilotto, D.O.**

HRSA/HHS  
Rockville, MD

**Christine Sannerud, Ph.D.**

DEA  
Arlington, VA

**Andrew J. Saxon, M.D.**

U.S. Department of Veterans Affairs Puget Sound  
Health Care System  
Seattle, WA

**Robert P. Schwartz, M.D.**

Friends Research Institute  
Baltimore, MD

**June S. Sivilli, M.A.**

ONDCP/EOP  
Washington, DC

**Rachel Skeete, M.D., M.H.S.**

FDA/HHS  
Silver Spring, MD

**Rene Sterling, Ph.D., M.H.A.**

HRSA/HHS  
Rockville, MD

**Geetha Subramaniam, M.D.**

NIDA/NIH  
Bethesda, MD

**C. "Rolly" Sullivan, M.D.**

West Virginia University School of Medicine  
Morgantown, WV

**Wilma Townsend, M.S.W.**

CSAT/SAMHSA  
Rockville, MD

**Alan Trachtenberg, M.D., M.P.H.**

FDA/HHS  
Silver Spring, MD

**Wayne Wakeland, Ph.D.**

Portland State University  
Portland, OR

**Sarah Wattenberg, M.S.W.**

Office of the Assistant Secretary for Health/HHS  
Rockville, MD

**Ben Wheat, M.D.**

Federal Bureau of Prisons  
U.S. Department of Justice  
Washington, DC

**Linda White-Young, M.S.W., L.I.C.S.W.**

CSAT/SAMHSA  
Rockville, MD

**Celia Winchell, M.D.**

FDA/HHS  
Silver Spring, MD

**George Woody, M.D.**

University of Pennsylvania  
Philadelphia, PA

**Stephen Wyatt, D.O.**

Carolinas HealthCare System  
Charlotte, NC

**OBSERVERS****David Byram**

Orexo US  
Simpsonville, SC

**Kathryn Cates-Wessel**

American Academy of Addiction Psychiatry  
East Providence, RI

**Robert DeLuca, R.Ph.**

Orexo US  
Morristown, NJ

**Beatrice Eld**

American Psychiatric Association  
Arlington, VA

**Rebecca Farley, M.P.H.**

National Council for Behavioral Health  
Washington, DC

**Rick Harwood**

National Association of State Alcohol and Drug  
Abuse Directors  
Washington, DC

**Rolley “Ed” Johnson, Pharm.D.**

Reckitt Benckiser Pharmaceuticals  
Richmond, VA

**Timothy Lepak, M.A.**

National Alliance of Advocates for Buprenorphine  
Treatment  
Farmington, CT

**Kathy McNamara, R.N.**

National Association of Community Health  
Centers  
Bethesda, MD

**Penny S. Mills, M.B.A.**

ASAM  
Chevy Chase, MD

**Mark W. Parrino, M.P.A.**

American Association for the Treatment of Opioid  
Dependence  
New York, NY

**Nicholas Reuter, M.P.H.**

Reckitt Benckiser Pharmaceuticals  
Rockville, MD

**Anthony Tommasello, Ph.D.**

Reckitt Benckiser Pharmaceuticals  
Pylesville, MD

**Nina Vidmer**

American Osteopathic Academy of Addiction Medicine  
Oak Brook, IL

## SMALL WORK GROUP PARTICIPANT LIST

### Small Work Group 1: Access to Buprenorphine: Patient Capacity and Quality Care

**Moderator:** C. "Rolly" Sullivan  
**Participants:** Jeffrey Baxter, Marc Fishman, Anthony Folland, Pamela Horn, Margaret Kotz, Michelle Lofwall, Mark A. McGrail, Susan Robilotto, Wayne Wakeland  
**Observers:** Robert DeLuca, Timothy Lepak, Nicholas Reuter

### Small Work Group 2: Access to Buprenorphine: Workforce Considerations

**Moderator:** Miriam Komaromy  
**Participants:** Steven Dettwyler, Adam Gordon, Brandon T. Johnson, Colleen LaBelle, Alexandra Nielsen, Alicia Swenson O'Brien, Patricia Pade, Andrew J. Saxon  
**Observers:** Rick Harwood, Kathy McNamara

### Small Work Group 3: The Role of Provider Training in Improving Access

**Moderator:** Stephen Wyatt  
**Participants:** James Finch, Reema Mehta, Wilma Townsend  
**Observers:** Anthony Tommasello, Nina Vidmer

### Small Work Group 4: Buprenorphine for an Opioid Use Disorder in Special Populations

**Moderator:** Marjorie Meyer  
**Participants:** Margaret Chisolm, Charles T. Ellis, Todd Korthuis, Sharon Levy, Nancy E. Paull, Robert P. Schwartz  
**Observer:** Rolley "Ed" Johnson

### Small Work Group 5: Addressing Health Systems and Reimbursement

**Moderator:** Kelly J. Clark  
**Participants:** Maureen Boyle, Joel M. Dubenitz, Daniel Hindman, Mark Kraus, Todd Molfenter, Yngvild Olsen, June S. Sivilli, Rachel Skeete, George Woody  
**Observers:** David Byram, Penny S. Mills

## **APPENDIX C: AGENDAS FOR GENERAL SESSIONS AND WORK GROUPS**

**AGENDA FOR GENERAL SESSIONS****Monday, September 22, 2014**

- 8:00–8:55 Registration
- 8:55–9:00 Welcome: Wilson M. Compton
- 9:00–9:30 Opening Remarks: Michael P. Botticelli
- 9:30–9:40 Addressing Hurdles and Looking Forward: Melinda Campopiano von Klimo
- 9:40–10:10 **Access to Buprenorphine: Patient Capacity and Quality Care**
- Miriam Komaromy: *Provider-Level Barriers to Buprenorphine Adoption*
  - Jinhee J. Lee: *DEA ARCOS Trend Analysis-NTP Buprenorphine Purchases*
  - Christopher M. Jones: *Trends in Need vs. Capacity for Opioid Agonist Therapy*
  - Moderator: Marc Fishman
- 10:10–11:10 Participant Discussion
- Moderator: Marc Fishman
- 11:10–11:25 Break
- 11:25–11:55 **The Role of Provider Training in Improving Access**
- Andrew J. Saxon: *Impact of Current Training Requirements*
  - Stephen Wyatt: *Training in Support of Adoption and Implementation*
  - Moderator: Maureen Boyle
- 11:55–12:55 Participant Discussion
- Moderator: Maureen Boyle
- 12:55–1:30 Lunch
- 1:30–2:00 **Access to Buprenorphine: Workforce Considerations**
- Colleen LaBelle: *Integrated Approach to Treatment Expansion*
  - Wayne Wakeland: *Buprenorphine Treatment Capacity: A Descriptive Agent-Based Model*
  - Moderator: Jeff Baxter
-

- 2:00–3:00 Participant Discussion
- *Moderator: Jeff Baxter*
- 3:00–3:15 Break
- 3:15–3:45 **Buprenorphine for an Opioid Use Disorder in Special Populations**
- Robert P. Schwartz: *Buprenorphine Treatment in the Criminal Justice System*
  - Michelle Lofwall: *The State of Practice for Special Populations*
  - *Moderator: Margaret Chisolm*
- 3:45–4:45 Participant Discussion
- *Moderator: Margaret Chisolm*
- 4:45–5:00 Wrap-Up Day 1: Melinda Campopiano von Klimo

## ***Tuesday, September 23, 2014***

- 8:00–8:45 Day 2 Check-In
- 8:45–9:00 Welcome and Opening of Day 2: Kimberly Jeffries Leonard
- 9:00–9:30 **Addressing Health Systems and Reimbursement**
- Kimberly Jeffries Leonard: *Affordable Care Act and Mental Health Parity: The Playing Field*
  - C. “Rolly” Sullivan: *Effective Care Delivery*
  - *Moderator: Elinore McCance-Katz*
- 9:30–10:25 Participant Discussion
- *Moderator: Elinore McCance-Katz*
- 10:25–10:30 Introduction of Senator Carl Levin by Pamela S. Hyde, Administrator, SAMHSA
- 10:30–10:45 Remarks From Senator Carl Levin
- 10:45–11:00 Break
- 11:00–12:30 Small Group Work and Lunch
- 12:30–1:45 Small Group Report-Out
- *Moderator: Melinda Campopiano von Klimo*
- 1:45–2:00 Closing Remarks: Elinore McCance-Katz

## WORK GROUP SESSIONS: AGENDA AND DISCUSSION QUESTIONS

### Work Group Objectives

At the summit, the work groups will:

- Use the questions provided to generate discussion.
- Identify key points regarding buprenorphine within each group's assigned topic area.

Key points may be:

- Concise problem statements
- Strategies to achieve specific benefits
- Metrics and analytic strategies to assess the scope of problems or the impact of possible solutions

In the future, the work groups may be asked to:

- Continue discussion of key issues online.
- Meet at upcoming small conferences (one of the five conferences scheduled in 2014–2015).
- Initiate work on implementation and skill acquisition (related to key summit topic points).
- Review reports, including guidance on implementation and skill acquisition.

### Work Group Agenda

- Introductions: Ask work group participants to spend 1 to 2 minutes introducing themselves and describing their research or clinical interests.
- Review work group specific questions (see below) and explain that a note taker has been assigned to capture the discussion.
- Identify key points to be discussed in the reporting-out session.
- If time permits, review the 2014 Buprenorphine Summit Bibliography and determine whether there are any pertinent references missing.

### Questions by Work Group Session

#### Work Group #1: Access to Buprenorphine: Patient Capacity and Quality Care

- What may be the impact of different formulations of buprenorphine on patient access and quality of care?
- What strategies are most likely to promote the adoption of buprenorphine by more providers?
- What is the best way to address diversion and accidental exposure due to expanded access to buprenorphine?
- How might technology best be used to improve quality of care as access is expanded to buprenorphine?

Work Group #2: Access to Buprenorphine: Workforce Considerations

- What may be the impact of different formulations of buprenorphine on workforce considerations?
- What strategies are most likely to promote the adoption of buprenorphine by more providers?
- How will integration of primary care, behavioral health, and addiction treatment impact workforce considerations?
- How should technology be used to support workforce considerations? How can technology support quality care?
- How do workforce considerations impact the risk of accidental exposure to buprenorphine and diversion?

Work Group #3: The Role of Provider Training in Improving Access

- What training is needed to support adoption of buprenorphine by those who obtain DATA 2000 waivers?
- What public or professional education is needed to increase willingness to provide, and interest in providing, buprenorphine among those who have not sought training?
- How can provider training improve the quality of care delivered to patients receiving buprenorphine?
- What training strategies can be used to reduce diversion and prevent accidental exposure?

Work Group #4: Buprenorphine for an Opioid Use Disorder in Special Populations

- What public or professional education is needed to expand access to buprenorphine for high-risk and high-benefit populations such as individuals involved in the criminal justice system, pregnant women, military service members, and veterans?
- What may be the impact of different formulations of buprenorphine on access to care for these populations?
- How do issues around diversion impact care of these populations and how can these issues be addressed?
- How can provider training improve access and quality of care delivered to these patient populations?

Work Group #5: Addressing Health Systems and Reimbursement

- What strategies do you suggest to increase provider engagement with third-party payers?
- What public and professional education is needed to increase willingness and interest in providing and supporting buprenorphine services?
- How can provider training support care coordination and engagement with third-party payers?
- What is the impact of diversion and accidental exposure on health system support?

General Crosscutting Issues:

- Elicit discussion on crosscutting topics such as technology, diversion, implementation, integration, quality, parity, health disparities, pediatric and other accidental exposures, formulations of buprenorphine, limitations imposed at the state level, psychosocial interventions, and use of buprenorphine for pain.

## **APPENDIX D: TREATMENT MODELS**

## TREATMENT MODELS DISCUSSED AT THE SUMMIT

Over the course of the Summit, several treatment models were discussed. Some of the models are further along in their development than others. The list of treatment models in this appendix is provided as a resource. Relevant links are given where available.

Clinical model of integrated care (West Virginia, University of West Virginia Medical School)

- Online information currently unavailable

FQHCs (Nationwide, such as SSTAR, Fall River, Massachusetts)—Centers get enhanced Medicaid reimbursement, and Medicare deductibles are waived

- <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network/MLN/MLNProducts/downloads/fqhcfactsheet.pdf>
- General FQHC information:
  - <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/qualified.html>
  - <http://www.cms.gov/Center/Provider-Type/Federally-Qualified-Health-Centers/FQHC-Center.html>

HIV BeeHIVE demonstration project (HRSA special project)

- [http://www.hab.hrsa.gov/about/hab/files/hab\\_spns\\_buprenorphine\\_monograph.pdf](http://www.hab.hrsa.gov/about/hab/files/hab_spns_buprenorphine_monograph.pdf)
- <https://www.careacttarget.org/library/bee-hive-buprenorphine-program-tools>

Hub-and-spoke model (Vermont)

- <http://www.leg.state.vt.us/reports/2013ExternalReports/285154.pdf>
- <http://www.gmcboard.vermont.gov/sites/gmcboard/files/Hub%26Spoke032014.pdf>
- <https://www.pcpcc.org/initiative/vermont-hub-and-spokes-health-homes>

Missouri model (cross-agency care coordination)

- Online information currently unavailable

Nurse care manager (NCM) model (Massachusetts, Boston Medical Center—Collaborative care model)

- <http://www.pcsmat.org/wp-content/uploads/2014/10/PCSSMAT-Online-Module-Role-of-FQHC-in-OBOT-Colleen-Labelle-AMERSA.pdf>

Patient and partner model (Maryland, Johns Hopkins Medical Center—Used in pediatrics and with adolescents)

- Online information currently unavailable

Patient-centered model (Maryland, Johns Hopkins Medical Center—Dissemination and connection of specialty care providers [maternity, special populations to primary care])

- Online information currently unavailable

Peer-mentoring model (PCSS—a SAMHSA-funded cooperative agreement)

- <http://www.pcss-o.org>

Project ECHO (New Mexico—Telehealth for physician consultations)

- <http://echo.unm.edu>

Rural programs with minimal staffing (Montana, significant Native American representation)

- Online information currently unavailable

## **APPENDIX E: BUPRENORPHINE BIBLIOGRAPHY**

# 2014 Buprenorphine Summit Bibliography

September 22-23, 2014

**SAMHSA Building**  
1 Choke Cherry Road  
Rockville, Maryland



---

## INTRODUCTION

This bibliography contains citations for more than 400 articles, books, chapters, and other materials published since 2007. It is organized into the following sections:

- Pharmacology of Buprenorphine
- Treatment with Buprenorphine
- Buprenorphine in the Treatment of Special Populations
- Preventing and Responding to Buprenorphine Diversion and Abuse
- Access to Treatment with Buprenorphine

To the extent possible, bibliographic entries appear under only one heading. The criterion for including an article in the bibliography was that it was published in a peer-reviewed journal within the last 7 years. The following databases were searched: Pubmed/Medline, PsycINFO, EBSCO/Medline, Scopus, Embase, Web of Science, and Health Policy Reference Center.

Articles submitted to the portal library in the weeks prior to the conference appear as the last section of the bibliography.

---

**Contributors:** The preface and bibliography were prepared by JBS International, Inc., staff members and consultants, including Project Director Bonnie B. Wilford, M.S., Medical Consultant Gwen Solan Littman, M.D., and Research Librarian Jeffrey L. Vender, M.L.I.S., in support of the SAMHSA–NIDA Buprenorphine Summit held September 22–23, 2014.

---

## BIBLIOGRAPHY: 2007–2014

### PHARMACOLOGY OF BUPRENORPHINE

- Pharmacology
- Efficacy and safety
- Side effects and adverse events
- Drug interactions
- New formulations
- Novel indications

\*\*\*\*\*

#### PHARMACOLOGY

Fareed A, Vayalapalli S, Casarella J, Amar R, Drexler K. Heroin anticraving medications: a systematic review. *Am J Drug Alcohol Abuse*. 2010; 36(6):332-341.

Greenwald M, Johanson CE, Bueller J, et al. Buprenorphine duration of action: mu-opioid receptor availability and pharmacokinetic and behavioral indices. *Biol Psychiatry*. 2007; 61:101-110.

Jones JD, Madera G, Comer SD. The reinforcing and subjective effects of intravenous and intranasal buprenorphine in heroin users. *Pharmacol Biochem Behav*. 2014; 122:299-306.

Masson CL, Rainey PM, Moody DE, McCance-Katz EF. Effects of HCV seropositive status on buprenorphine pharmacokinetics in opioid-dependent individuals. *Am J Addict*. 2014; 23(1):34-40.

Moody DE, Fang WB, Morrison J, McCance-Katz E. Gender differences in pharmacokinetics of maintenance dosed buprenorphine. *Drug Alcohol Depend*. 2011; 118(2-3):479-483.

Pichot JT. General opioid pharmacology. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Washington, DC: American Psychiatric Publishing, Inc.; 2011.

Reckitt Benckiser Pharmaceuticals Inc. *Full Prescribing Information: Suboxone*. Richmond, VA (Package Insert 1-1202-019-U.S.-0812, Revised). Richmond, VA: Reckitt-Benckiser; August 2010.

Saxon AJ, Hser YI, Woody G, Ling W. Medication-assisted treatment for opioid addiction: methadone and buprenorphine. *J Food Drug Anal*. 2013; 21(4):S69-S72.

#### EFFICACY AND SAFETY

Fareed A, Vayalapalli S, Byrd-Sellers J, Casarella J, Drexler K. Safety and efficacy of long-term buprenorphine maintenance treatment. *Addictive Disorders & Their Treatment*. 2011; 10(3):123-130.

---

Strain EC. Efficacy and safety of buprenorphine. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Washington, DC: American Psychiatric Publishing, Inc.; 2011.

### **SIDE EFFECTS AND ADVERSE EVENTS**

Boyer EW, McCance-Katz EF, Marcus S. Methadone and buprenorphine toxicity in children. *Am J Addict*. 2010; 19(1):89-95.

Edwards RT, McCormick-Deaton C, Hosanagar A. Acute urinary retention secondary to buprenorphine administration. *Am J Emerg Med*. 2014; 32(1):109.e1-e2.

Fareed AJ, Byrd-Sellers J, Vayalapalli S, Drexler K, Phillips L. Predictors of diabetes mellitus and abnormal blood glucose in patients receiving opioid maintenance treatment. *Am J Addict*. 2013; 22(4):411-416.

Fareed A, Patil D, Scheinberg K, et al. Comparison of QTc interval prolongation for patients in methadone versus buprenorphine maintenance treatment: a 5-year follow-up. *J Addict Dis*. 2013; 32(3):244-251.

Gibson AE, Degenhardt LJ. Mortality related to pharmacotherapies for opioid dependence: a comparative analysis of coronial records. *Drug Alcohol Rev*. 2007; 26(4):405-410.

Huilaja L, Riekkki R, Immonen A, Tasanen K. Allergic contact dermatitis from buprenorphine and oral tolerance to other opioid derivatives in three patients. *Dermatology*. 2014; 228(2):130-131.

Rapeli P, Fabritius C, Kalska H, Alho H. Cognitive functioning in opioid-dependent patients treated with buprenorphine, methadone, and other psychoactive medications: stability and correlates. *BMC Clin Pharmacol*. 2011; 11:13.

Reece AS, Hulse GK. Impact of lifetime opioid exposure on arterial stiffness and vascular age: cross-sectional and longitudinal studies in men and women. *BMJ Open*. 2014; 4(6):e004521.

Saber-Tehrani AS, Bruce RD, Altice RL. Pharmacokinetic drug interactions and adverse consequences between psychotropic medications and pharmacotherapy for the treatment of opioid dependence. *Am J Drug Alcohol Abuse*. 2011; 37(1):1-11.

Saxon AJ, Ling W, Hillhouse M, et al. Buprenorphine/naloxone and methadone effects on laboratory indices of liver health: a randomized trial. *Drug Alcohol Depend*. 2013; 128(1-2):71-76.

Stutius LM, Pessach I, Lee J, et al. Sublingual desensitization for buprenorphine hypersensitivity. *J Allergy Clin Immunol*. 2010; 125(4):938-939.

Varma S, Balachander S, Basu D. Buprenorphine-induced psychotic symptoms: a case report. *Prim Care Companion CNS Disord*. 2013; 15(4).

Zuin M, Giorgini A, Selmi C, et al. Acute liver and renal failure during treatment with buprenorphine at therapeutic dose. *Dig Liver Dis*. 2009; 41(7):e8-e10.

---

## DRUG INTERACTIONS

Baker J, Rainey PM, Moody DE, Morse G, Ma Q, McCance-Katz E. Interactions between buprenorphine and antiretrovirals: nucleos(t)ide reverse transcriptase inhibitors (NRTI) didanosine, lamivudine, and tenofovir. *Am J Addict.* 2010; (19):17-29.

Gruber VA, McCance-Katz EF. Methadone, buprenorphine, and street drug interactions with antiretroviral medications. *Curr HIV/AIDS Rep.* 2010; 7(3):152-160.

Gruber VA, Rainey PM, Moody DE, et al. Interactions between buprenorphine and the protease inhibitors darunavir-ritonavir and fosamprenavir-ritonavir. *Clin Infect Dis.* 2012; 54(3):414-423.

McCance-Katz EF. Drug interactions in the pharmacological treatment of substance use disorders. In: Nunes EV, Selzer J, Levounis P, Davies CA, eds. *Substance Dependence and Co-Occurring Psychiatric Disorders: Best Practices for Diagnosis and Clinical Treatment.* Kingston, NJ: Civic Research Institute; 2010:1-15.

McCance-Katz EF, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Clinically Relevant Drug Interactions: Buprenorphine or Methadone with Other Frequently Prescribed Drugs.* East Providence, RI: American Academy of Addiction Psychiatry; September 24, 2010.

McCance-Katz EF, Moody DE, Morse GD, et al. Interaction between buprenorphine and atazanavir or atazanavir/ritonavir. *Drug Alcohol Depend.* 2007; 91(2-3):269-278.

McCance-Katz EF, Moody DE, Morse GD, et al. Lack of clinically significant drug interactions between nevirapine and buprenorphine *Am J Addict.* 2010; 19(1):30-37.

McCance-Katz EF, Moody DE, Prathikanti S, Friedland G, Rainey PM. Rifampin, but not rifabutin, may produce opiate withdrawal in buprenorphine-maintained patients. *Drug Alcohol Depend.* 2011; 118(2-3):326-334.

McCance-Katz EF, Sullivan LE, Nallani S. Drug interactions of clinical importance among the opioids, methadone and buprenorphine, and other frequently prescribed medications: a review. *Am J Addict.* 2010; 19(1):4-16.

Saber-Tehrani AS, Bruce RD, Altice FL. Pharmacokinetic drug interactions and adverse consequences between psychotropic medications and pharmacotherapy for the treatment of opioid dependence. *Am J Drug Alcohol Abuse.* 2011; 37(1):1-11.

## NEW FORMULATIONS

Childers JW, Arnold RM. Use of the low-dose buprenorphine patch: author commentary. *J Palliat Med.* 2014; 17(4):381-382.

Dankiewicz EH. Use of the low-dose buprenorphine patch: a response. *J Palliat Med.* 2014; 17(4):379-80.

Fischer A, Jönsson M, Hjelmström P. Pharmaceutical and pharmacokinetic characterization of a novel sublingual buprenorphine/naloxone tablet formulation in healthy volunteers [published online ahead of print October 7, 2013]. *Drug Dev Ind Pharm.*

---

Nasser AF, Heidbreder C, Gomeni R, Fudala P, Zheng B, Greenwald M. A population pharmacokinetic and pharmacodynamic modelling approach to support the clinical development of rbp-6000, a new, subcutaneously injectable, long-acting, sustained-release formulation of buprenorphine, for the treatment of opioid dependence [published online ahead of print July 12, 2014]. *Clin Pharmacokinet*.

Rastegar DA. Buprenorphine implants and opioid dependence. *JAMA*. 2011; 305(3):253.

Rosenthal RN, Ling W, Casadonte P, et al. Buprenorphine implants for treatment of opioid dependence: randomized comparison to placebo and sublingual buprenorphine/naloxone. *Addiction*. 2013; 108(12):2141-2149.

Tetrault JM, Fiellin DA. Adding buprenorphine implants to counselling reduces opioid use over 6 months in opioid-dependent adults. *Evid Based Ment Health*. 2011; 14(1):30.

### **NOVEL INDICATIONS**

Correa-Illanes G, Roa RG, B Piñeros JL, Ferrer FT, Adriasola VR. Retrospective analysis of 4 years of clinical experience with transdermal buprenorphine (Transtec) in post-traumatic pain. *Pain Manag*. 2014; 4(3):181-190.

Dasgupta N, Bailey EJ, Cicero T, et al. Post-marketing surveillance of methadone and buprenorphine in the United States. *Pain Med*. 2010; 11(7):1078-1091.

Mooney LJ, Nielsen S, Saxon A, et al. Cocaine use reduction with buprenorphine (CURB): rationale, design, and methodology. *Contemp Clin Trials*. 2013; 34(2):196-204.

Raffa RB, Haidery M, Huang HM, et al. The clinical analgesic efficacy of buprenorphine [published online ahead of print July 29, 2014]. *J Clin Pharm Ther*. doi:10.1111/jcpt.12196.

Rosen K, Gutierrez A, Haller D, Potter JS. Sublingual buprenorphine for chronic pain: A survey of clinician prescribing practices. *Clin J Pain*. 2014; 30(4):295-300.

Striebel JM, Kalapatapu RK. The anti-suicidal potential of buprenorphine: a case report. *Int J Psychiatry Med*. 2014; 47(2):169-174.

Urban V, Sullivan R. Buprenorphine rescue from naltrexone-induced opioid withdrawal during relatively rapid detoxification from high-dose methadone: a novel approach. *Psychiatry (Edgemont)*. 2008; 5(4):56-58.

## TREATMENT WITH BUPRENORPHINE

- Clinical protocols and evidence-based practices
- Patient assessment, selection, and education
- Management of withdrawal
- Induction and stabilization
- Adjunctive therapies
- Patient monitoring
- Treatment adherence, compliance, and retention
- Relapse
- Buprenorphine taper
- Treatment outcomes

\*\*\*\*\*

### CLINICAL PROTOCOLS AND EVIDENCE-BASED PRACTICES

Alford DP, LaBelle CT, Kretsch N, et al. Collaborative care of opioid-addicted patients in primary care using buprenorphine: five-year experience. *Arch Intern Med.* 2011; 171(5):425-431.

American College of Obstetricians and Gynecologists (ACOG) & American Society of Addiction Medicine (ASAM). Committee Opinion 524: Opioid abuse, dependence, and addiction in pregnancy. *Obstet Gynecol.* 2012; 119:1070-1076.

American Society of Addiction Medicine. *Public Policy Statement on Office-Based Opioid Agonist Treatment (OBOT)*. Chevy Chase, MD: The Society; 2010.

Andrews CM, D'Aunno TA, Pollack HA, Friedmann, PD. Adoption of evidence-based clinical innovations: the case of buprenorphine use by opioid treatment programs. *Med Care Res Rev.* 2014; 71(1):43-60.

Balhara YP. Time to include buprenorphine-naloxone combination in the WHO Model List of Essential Medicines. *J Opioid Manag.* 2013; 9(4):237.

Barry DT, Irwin KS, Jones ES, et al. Integrating buprenorphine treatment into office-based practice: a qualitative study. *J Gen Intern Med.* 2009; 24(2):218-225.

Barry DT, Moore BA, Pantaloni MV, et al. Patient satisfaction with primary care office-based buprenorphine/naloxone treatment. *J Gen Intern Med.* 2007; 22(2):242-245.

Crist RC, Clarke TK, Ang A, et al. An intronic variant in OPRD1 predicts treatment outcome for opioid dependence in African-Americans. *Neuropsychopharmacology.* 2013; 38(10):2003-2010.

Fiellin DA. The first three years of buprenorphine in the United States: Experience to date and future directions. *J Addict Med.* 2007; 1(2):62-67.

Finch JW, Kamien JB, Amass L. Two-year experience with buprenorphine-naloxone (Suboxone) for maintenance treatment of opioid dependence within a private practice setting. *J Addict Med.* 2007; 1(2):104-110.

Gordon AJ, Krumm M, for the Buprenorphine Initiative in the VA (BIV). *Buprenorphine Resource Guide, Version 8.* Washington, DC: Department of Veterans Affairs, April 2008.

Handford C, Kahan M, Srivastava A, et al. *Buprenorphine/Naloxone for Opioid Dependence: Clinical Practice Guideline.* Toronto, Canada: Centre for Addiction and Mental Health; 2011.

Institute for Research, Education and Training in Addiction (IRETA). *Best Practices in the Use of Buprenorphine.* Final Expert Panel Report. Pittsburgh, PA: Community Care Behavioral Health Organizations, October 18, 2011.

Kraus ML, Alford DP, Kotz MM, et al. Statement of the American Society Of Addiction Medicine Consensus Panel on the use of buprenorphine in office-based treatment of opioid addiction. *J Addict Med.* 2011; 5(4):254-263.

Liebschutz JM, Crooks D, Herman D, et al. Buprenorphine treatment for hospitalized, opioid-dependent patients: a randomized clinical trial. *JAMA Intern Med.* 2014; 174(8):1369-1376.

Lingford-Hughes AR, Welch S, Peters L, Nutt DJ, for the British Association for Psychopharmacology (BAP) Expert Reviewers Group. BAP updated guidelines: evidence-based guidelines for the pharmacological management of substance abuse, harmful use, addiction and comorbidity: recommendations from BAP. *J Psychopharm.* 2012; 26(7):899-952.

McNicholas LF. Clinical guidelines for the use of buprenorphine in the treatment of opioid addiction. *A Tool for Buprenorphine Care.* 2008; 1(12):12-20.

National Institute for Health and Clinical Excellence. Methadone and buprenorphine for the management of opioid dependence. *NICE Technology Appraisal Guidance 114.* London, England: National Institute for Health and Clinical Excellence; 2007 [Updated March 2010].

National Institute on Drug Abuse. *Principles of Drug Addiction Treatment, Third Edition.* (NIH Publication No. 12-4180.) Rockville, MD: National Institute on Drug Abuse, National Institutes of Health; 2012.

Pecoraro A, Ma M, Woody GE. The science and practice of medication-assisted treatments for opioid dependence. *Subst Use Misuse.* 2012; 47(8-9):1026-1040.

Shanahan CW, Beers D, Alford DP, Brigandi E, Samet JH. A transitional opioid program to engage hospitalized drug users. *J Gen Intern Med.* 2010; 25(8):803-808.

Stephenson DK, for the CSAM Committee on Treatment of Opioid Dependence. *Draft Guidelines for Physicians Working in California Opioid Treatment Programs.* San Francisco, CA: California Society of Addiction Medicine; 2008.

---

Tetraault JM, Fiellin DA. Current and potential pharmacological treatment options for maintenance therapy in opioid-dependent individuals. *Drugs*. 2012; 72(2):217-228.

Torrington M, Domier CP, Hillhouse M, Ling W. Buprenorphine 101: treating opioid dependence with buprenorphine in an office-based setting. *J Addict Dis*. 2007; 26(3):93-99.

World Health Organization. *Guidelines for the Psychologically Assisted Pharmacological Treatment of Opioid Dependence*. Geneva, Switzerland: World Health Organization; 2009.

## **PATIENT ASSESSMENT, SELECTION, AND EDUCATION**

Centers for Disease Control and Prevention. Prescription painkiller overdoses. *Policy Impact Brief*. Atlanta, GA: Centers for Disease Control and Prevention, 2013 [accessed at <http://www.cdc.gov/homeandrecrationalafety/rxbrief/>].

Clarke TK, Crist RC, Ang A, et al. Genetic variation in OPRD1 and the response to treatment for opioid dependence with buprenorphine in European-American females. *Pharmacogenomics J*. 2014; 14(3):303-308.

Fareed AJ, Casarella J, Amar R, Drexler K. Is there a better way to match patients to opioid maintenance treatment: a case report. *Am J Addict*. 2009; 18(2):180-181.

Fareed AK, Scheinberg K, Vayalapalli S, et al. Factors affecting norbuprenorphine level in monitoring clinical outcome for buprenorphine-maintained patients. *Addictive Disorders & Their Treatment* 2013; 12(4):167-174.

Fingerhood MI, King VL, Brooner RK, Rastegar DA. A comparison of characteristics and outcomes of opioid-dependent patients initiating office-based buprenorphine or methadone maintenance treatment. *Subst Abus*. 2014; 35(2):122-126.

Fox AD, Shah PA, Sohler NL, Lopez CM, Starrels JL, Cunningham CO. I heard about it from a friend: assessing interest in buprenorphine treatment. *Subst Abus*. 2014; 35(1):74-79.

Gerra G, Somaini L, Leonardi C, Cortese E, Maremmanni I, Manfredini M, Donnini C. Association between gene variants and response to buprenorphine maintenance treatment. *Psychiatry Res*. 2014; 215(1):202-207.

Levounis P. Patient assessment. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Washington, DC: American Psychiatric Publishing, Inc.; 2011.

Mattick RP, Breen C, Kimber J, Davoli M. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database Syst Rev*. 2014; (2):CD002207 [Update of *Cochrane Database Syst Rev*. 2008; (2):CD002207.]

Mitchell SG, Kelly SM, Gryczynski J, et al. African American patients seeking treatment in the public sector: Characteristics of buprenorphine vs. methadone patients. *Drug Alcohol Depend*. 2012; 122(1-2):55-60.

Moore BA, Fiellin DA, Barry DT, et al. Primary care office-based buprenorphine treatment: comparison of heroin and prescription opioid dependent patients. *J Gen Intern Med.* 2007; 22(4):527-530.

Murphy SM, Fishman PA, McPherson S, et al. Determinants of buprenorphine treatment for opioid dependence. *J Subst Abuse Treat.* 2014; 46(3):315-319.

Newman RG. Prescription opioid dependence: the clinical challenge. *JAMA Psychiatry.* 2014; 71(3):338.

National Institute on Drug Abuse. America's Addiction to Opioids: Heroin and Prescription Drug Abuse (Testimony by Nora D. Volkow before the Senate Caucus on International Narcotics Control, May 14, 2014). Bethesda, MD: National Institute on Drug Abuse, 2014 [accessed at <http://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2014/americas-addiction-to-opioids-heroin-prescription-drug-abuse>].

O'Brien CP. Toward a rational selection of treatment for addiction. *Curr Psychiatry Rep.* 2007; 9(6):441-442.

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. *Treatment Episode Data Set (TEDS): 2001-2011. National Admissions to Substance Abuse Treatment Services.* (BHSIS Series S-65, HHS Publication No. [SMA] 13-4772.) Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.

## MANAGEMENT OF WITHDRAWAL

Blondell RD, Smith SJ, Servoss TJ, DeVaul S, Simons R. Buprenorphine and methadone: a comparison of patient completion rates during inpatient detoxification. *J Addict Dis.* 2007; 26(2):3-11.

Brigham GS, Amass L, Winhusen T, Harrer JM, Pelt A. Using buprenorphine short-term taper to facilitate early treatment engagement. *J Subst Abuse Treat.* 2007; 32(4):349-356.

Diaper AM, Law FD, Melichar JK. Pharmacological strategies for detoxification. *Br J Clin Pharmacol.* 2014; 77(2):302-314.

Donovan DM, Knox PC, Skytta JA, Blayney JA, DiCenzo J. Buprenorphine from detox and beyond: preliminary evaluation of a pilot program to increase heroin dependent individuals' engagement in a full continuum of care. *J Subst Abuse Treat.* 2013; 44(4):426-432.

Gowing L, Ali R, White JM. Buprenorphine for the management of opioid withdrawal. *Cochrane Database Syst Rev.* 2009; (3):CD002025.

Katz EC, Schwartz RP, King S, et al. Brief vs. extended buprenorphine detoxification in a community treatment program: engagement and short-term outcomes. *Am J Drug Alc Abuse.* 2009; 35(2):63-67.

Kleber HD. Pharmacologic treatments for opioid dependence: detoxification and maintenance options. *Dialogues Clin Neurosci.* 2007; 9(4):455-470.

Manlandro JJ Jr. Using buprenorphine for outpatient opioid detoxification. *J Am Osteopath Assoc.* 2007; 107(9 suppl 5):ES11-ES16. Review.

Patrick ME, Dunn KE, Badger GJ, Heil SH, Higgins ST, Sigmon SH. Spontaneous reductions in smoking during double-blind buprenorphine detoxification. *Addict Behav.* 2014; 39(9):1353-1356.

Reed LJ, Glasper A, de Wet CJ, Beam J, Gossop, M. Comparison of buprenorphine and methadone in the treatment of opiate withdrawal: possible advantages of buprenorphine for the treatment of opiate-benzodiazepine codependent patients? *J Clin Psychopharmacol.* 2007; 27(2):188-192.

Sigmon SC, Bisaga A, Nunes EV, O'Connor PG, Kosten T, Woody G. Opioid detoxification and naltrexone induction strategies: recommendations for clinical practice. *Am Journal Drug Alcohol Abuse.* 2012; 38(3):187-199.

Substance Abuse and Mental Health Services Administration. Protracted withdrawal. *Substance Abuse Treatment Advisory, Vol. 9, Issue 1.* (DHHS Publication No. [SMA] 10-4554.) Rockville, MD: Substance Abuse and Mental Health Services Administration; 2010.

Tompkins DA, Smith MT, Mintzer MZ, Campbell CM, Strain EC. A double blind, within subject comparison of spontaneous opioid withdrawal from buprenorphine versus morphine. *J Pharmacol Exp Ther.* 2014; 348(2):217-226.

Westermeyer J, McCance-Katz EF. Course and treatment of buprenorphine/naloxone withdrawal: an analysis of case reports. *Am J Addict.* 2012; 21(5):401-403.

Ziedonis DM, Amass L, Steinberg M, et al. Predictors of outcome for short-term medically supervised opioid withdrawal during a randomized, multicenter trial of buprenorphine-naloxone and clonidine in the NIDA Clinical Trials Network drug and alcohol dependence. *Drug Alcohol Depend.* 2009; 99(1-3):28-36.

## **INDUCTION AND STABILIZATION**

Brown RA, Bloom EL, Hecht J, Moitra E, Herman D, Stein M. A pilot study of a distress tolerance treatment for opiate-dependent patients initiating buprenorphine: rationale, methodology, and outcomes. *Behav Modif.* 2014; 38(5):730-759.

Casadonte PP, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Buprenorphine Induction.* East Providence, RI: American Academy of Addiction Psychiatry, October 27, 2009.

Fareed A, Vayalapalli S, Casarella J, Drexler K. Effect of buprenorphine dose on treatment outcome. *J Addict Dis.* 2012; 31(1):8-18.

Fareed A, Vayalapalli S, Casarella J, Drexler K. Treatment outcome for flexible dosing buprenorphine maintenance treatment. *Am J Drug Alcohol Abuse.* 2012; 38(2):155-160.

Gunderson EW, Levin FR, Rombone MM, Vosburg SK, Kleber HD. Improving temporal efficiency of outpatient buprenorphine induction. *Am J Addict.* 2011; 20(5):397-404.

Gunderson EW, Wang XG, Fiellin DA, Bryan B, Levin F. Unobserved versus observed office buprenorphine/naloxone induction: a pilot randomized clinical trial. *Addict Behav.* 2010; 35(5):537-540.

---

Lee JD, Grossman E, DiRocco D, Gourevitch MN. Home buprenorphine/naloxone induction in primary care. *J Gen Intern Med.* 2009; 24(2):226-232.

Mannelli P, Wu LT, Peindl KS, Swartz, MS, Woody GE. Extended release naltrexone injection is performed in the majority of opioid dependent patients receiving outpatient induction: a very low dose naltrexone and buprenorphine open label trial. *Drug Alcohol Depend.* 2014; 138:83-88.

Nielsen S, Hillhouse M, Weiss RD, et al. The relationship between primary prescription opioid and buprenorphine-naloxone induction outcomes in a prescription opioid dependent sample. *Am J Addict.* 2014; 23(4):343-348.

Strain EC, Harrison JA, Bigelow GE. Induction of opioid-dependent individuals onto buprenorphine and buprenorphine/naloxone soluble films. *Clin Pharmacol Ther.* 2011; 89(3):443-449.

Strain EC, Lofwall MR. Buprenorphine maintenance. In: Galanter M, Kleber HD, eds. *The American Psychiatric Publishing Textbook of Substance Abuse Treatment* (4th ed.). Arlington, VA: American Psychiatric Publishing, Inc.; 2008: 309-324.

## ADJUNCTIVE THERAPIES

Amato L, Minozzi S, Davoli M, Vecchi S. Psychosocial combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of opioid dependence. *Cochrane Database Syst Rev.* 2008 Oct 8; (4):CD004147. (Update of Cochrane Database Syst Rev. 2004 Oct 18; (4):CD005031.)

Brigham GS, Slesnick N, Winhusen TM, Lewis D, Guo X, Somoza E. A randomized pilot clinical trial to evaluate the efficacy of Community Reinforcement and Family Training for Treatment Retention (CRAFT-T) for improving outcomes for patients completing opioid detoxification. *Drug Alcohol Depend.* 2014; 138:240-243.

Brown SE, Altice FL. Self-management of buprenorphine/naloxone among online discussion board users. *Subst Use Misuse.* 2014; 49(8):1017-1024.

Christensen DR, Landes RD, Jackson L, et al. Adding an internet-delivered treatment to an efficacious treatment package for opioid dependence [published online ahead of print August 4, 2014]. *J Consult Clin Psychol.*

Copenhaver MM, Bruce RD, Altice FL. Behavioral counseling content for optimizing the use of buprenorphine for treatment of opioid dependence in community-based settings: a review of the empirical evidence. *Am J Drug Alcohol Abuse.* 2007; 33(5):643-654.

Edelman EJ, Moore BA, Caffrey S, et al. HIV testing and sexual risk reduction counseling in office-based buprenorphine/naloxone treatment. *J Addict Med.* 2013; 7(6):410-416.

Fiellin DA, Barry DT, Sullivan LE, et al. A randomized trial of cognitive behavioral therapy in primary care-based buprenorphine. *Am J Med.* 2013; 126(1):74.e11-77.

Friedmann PD, Cioe PA. Psychosocial and supportive treatment. In: Renner JA Jr, Levounis P, eds., *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence.* Washington, DC: American Psychiatric Publishing, Inc.; 2011.

Mitchell SG, Gryczynski J, Schwartz RP, O'Grady KE, Olsen YK, Jaffe JH. A randomized trial of intensive outpatient (IOP) vs. standard outpatient (OP) buprenorphine treatment for African Americans. *Drug Alcohol Depend.* 2013; 128(3):222-229.

Nielsen S, Hillhouse M, Mooney L, et al. Buprenorphine pharmacotherapy and behavioral treatment: Comparison of outcomes among prescription opioid users, heroin users and combination users. *J Subst Abuse Treat.* 2014 Jun 28. pii: S0740-5472(14)00114-7.

O'Farrell TJ, Murphy M, Alter J, Ang A, Ling W. Behavioral family counseling for substance abuse: a treatment development pilot study. *Addict Behav.* 2010; 35(1):1-6.

Saxon AJ, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Psychosocial Aspects of Treatment in Patients Receiving Buprenorphine/Naloxone.* East Providence, RI: American Academy of Addiction Psychiatry, February 22, 2008.

Weiss RD. Behavioural treatment combined with buprenorphine does not reduce opioid use compared with buprenorphine alone. *Evid Based Ment Health.* 2014; 17(2):e2.

Weiss RD, Griffin ML, Potter JS, et al. Who benefits from additional drug counseling among prescription opioid-dependent patients receiving buprenorphine-naloxone and standard medical management? *Drug Alcohol Depend.* 2014; 140:118-122.

Weiss RD, Potter JS, Fiellin DA, et al. Adjunctive counseling during brief and extended buprenorphine-naloxone treatment for prescription opioid dependence: a 2-phase randomized controlled trial. *Arch Gen Psychiatry.* 2011; 68(12):1238-1246.

## **PATIENT MONITORING**

Belsey SL, Couchman L, Flanagan RJ. Buprenorphine detection in urine using liquid chromatography-high-resolution mass spectrometry: comparison with cloned enzyme donor immunoassay (ThermoFisher) and homogeneous enzyme immunoassay (Immunoanalysis). *J Anal Toxicol.* 2014; 38(7):438-443.

Chawarski MC, Fiellin DA, O'Connor PG, Bernard M, Schottenfeld RS. Utility of sweat patch testing for drug use monitoring in outpatient treatment for opiate dependence. *J Subst Abuse Treat.* 2007; 33(4):411-415.

Gourlay DL, Heit HA, Caplan YH. *Urine Drug Testing in Clinical Practice: The Art and Science of Patient Care.* Sacramento, CA: California Society of Family Physicians; 2010.

Guo AY, Ma JD, Best BM, Atayee RS. Urine specimen detection of concurrent nonprescribed medicinal and illicit drug use in patients prescribed buprenorphine. *J Anal Toxicol.* 2013; 37(9):636-641.

Notley C, Holland R, Maskrey V. Regaining control: the patient experience of supervised compared with unsupervised consumption in opiate substitution treatment. *Drug Alcohol Rev.* 2014; 33(1):64-70.

Pirro V, Fusari I, Di Corcia D, et al. Hair analysis for long-term monitoring of buprenorphine intake in opiates withdrawal [published online ahead of print April 7, 2014]. *Ther Drug Monit.*

---

Wilcox CE, Bogenschutz MP, Nakazawa M, Woody G. Concordance between self-report and urine drug screen data in adolescent opioid dependent clinical trial participants. *Addict Behav.* 2013; 38(10):2568-2574.

### **TREATMENT ADHERENCE, COMPLIANCE, AND RETENTION**

Balhara YP. A chart review based comparative study of retention rates for two dispensing regimens for buprenorphine for subjects with opioid dependence at a tertiary care substance use disorder treatment center. *J Opioid Manag.* 2014; 10(3):200-206.

Casati A, Piontek D, Pfeiffer-Gerschel T. Patterns of non-compliant buprenorphine, levomethadone, and methadone use among opioid dependent persons in treatment. *Subst Abuse Treat Prev Policy.* 2014; 9:19.

Fareed A, Eilender P, Ketchen B, et al. Factors affecting noncompliance with buprenorphine maintenance treatment [published online ahead of print July 28, 2014]. *J Addict Med.*

Fiellin DA, Moore BA, Sullivan LE, et al. Long-term treatment with buprenorphine/naloxone in primary care: Results at 2-5 years. *Am J Addict.* 2008; 17(2):116-120.

Gryczynski J, Mitchell SG, Jaffe JH, et al. Retention in methadone and buprenorphine treatment among African Americans. *J Subst Abuse Treat.* 2013; 45(3):287-292.

Gryczynski J, Mitchell SG, Jaffe JH, O'Grady KE, Olsen YK, Schwartz RP. Leaving buprenorphine treatment: patients' reasons for cessation of care. *J Subst Abuse Treat.* 2014; 46(3):356-361.

Guillou Landreat M, Sebille-Rivain V, Victorri Vigneau C, Foucher Y, Venisse J, Jolliet P. Buprenorphine prescription compliance: an original observational and longitudinal study. *J Psychoactive Drugs.* 2014; 46(2):162-167.

Hser YI, Saxon AJ, Huang D, et al. Treatment retention among patients randomized to buprenorphine/naloxone compared to methadone in a multi-site trial. *Addiction.* 2014; 109(1):79-87.

Kelly SM, Brown BS, Katz EC, et al. A comparison of attitudes toward opioid agonist treatment among short-term buprenorphine patients. *Am J Drug Alcohol Abuse.* 2012; 38(3):233-238.

Larance B, Carragher N, Mattick RP, Lintzeris N, Ali R, Degenhardt L. A latent class analysis of self-reported clinical indicators of psychosocial stability and adherence among opioid substitution therapy patients: do stable patients receive more unsupervised doses? *Drug Alcohol Depend.* 2014; 142:46-55.

Molfenter TD. Reducing appointment no-shows: going from theory to practice. *Subst Use Misuse.* 2014; 48(9):743-749.

Neumann AM, Blondell RD, Azadfard M, Nathan G, Homish GG. Primary care patient characteristics associated with completion of 6-month buprenorphine treatment. *Addict Behav.* 2013; 38(11):2724-2728.

Schwarz R, Zelenev A, Bruce RD, et al. Retention on buprenorphine treatment reduces emergency department utilization, but not hospitalization, among treatment-seeking patients with opioid dependence. *J Subst Abuse Treat.* 2012; 43(4):451-457.

Sethi R, Petrakis I. Differential diagnosis for a stable patient maintained on buprenorphine who gives a urine toxicology screen negative for buprenorphine. *Am J Addict.* 2014; 23(3):318-319.

Springer SA, Qiu J, Saber-Tehrani AS, et al. Retention on buprenorphine is associated with high levels of maximal viral suppression among HIV-infected opioid dependent released prisoners. *PLoS ONE.* 2012; 7(5):e38335.

Wikner BN, Ohman I, Seldén T, Druid H, Brandt L, Kieler H. Opioid-related mortality and filled prescriptions for buprenorphine and methadone. *Drug Alcohol Rev.* 2014; 33(5):491-498.

## RELAPSE

Ferri M, Finlayson AJ, Wang L, Martin P. Predictive factors for relapse in patients on buprenorphine maintenance. *Am J Addict.* 2014; 23(1):62-67.

## BUPRENORPHINE TAPER

Blum K, Oscar-Berman M, Femino J, et al. Withdrawal from buprenorphine/naloxone and maintenance with a natural dopaminergic agonist: a cautionary note. *J Addict Res Ther.* 2013; 4(2).

Brigham GS, Amass L, Winhusen T, Harrer JM, Pelt A. Using buprenorphine short-term taper to facilitate early treatment engagement. *J Subst Abuse Treat.* 2007; 32(4):349-356.

Ling W, Hillhouse M, Domier C, et al. Buprenorphine tapering schedule and illicit opioid use. *Addiction.* 2009; 104(2):256-265.

Makhinson M, Gomez-Makhinson J. A successful treatment of buprenorphine withdrawal with the dopamine receptor agonist pramipexole. *Am J Addict.* 2014; 23(5):475-477.

Mannelli P, Peindl KS, Lee T, Bhatia KS, Wu L. Buprenorphine-mediated transition from opioid agonist to antagonist treatment: state of the art and new perspectives. *Curr Drug Abuse Rev.* 2012; 5:52-63.

Sigmon SC, Dunn KE, Saulsgiver K, et al. A randomized, double-blind evaluation of buprenorphine taper duration in primary prescription opioid abusers. *JAMA Psychiatry.* 2013; 70(12):1347-1354.

## TREATMENT OUTCOMES

Amato L, Minozzi S, Davoli M, Vecchi S. Psychosocial and pharmacological treatments versus pharmacological treatments for opioid detoxification. *Cochrane Database Syst Rev.* 2011; (9):CD005031. (Update of *Cochrane Database Syst Rev.* 2008; (4):CD005031.)

Amato L, Minozzi S, Davoli M, Vecchi S. Psychosocial combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of opioid dependence. *Cochrane Database Syst Rev.* 2008; (4):CD004147. (Update of *Cochrane Database Syst Rev.* 2004; (4):CD005031.)

- 
- Barry MT, Moore BA, Pantaloni MV, et al. Patient satisfaction with primary care office-based buprenorphine/naloxone treatment. *Am J Gen Intern Med.* 2007; 22(2):242-245.
- Doolittle B, Becker W. A case series of buprenorphine/naloxone treatment in a primary care practice. *Subst Abus.* 2011; 32:262-265.
- Ducharme S, Fraser R, Gill K. Update on the clinical use of buprenorphine in opioid-related disorders. *Can Fam Physician.* 2012; 58(1):37-41.
- Fiellin DA, Moore BA, Sullivan LE, et al. Long-term treatment with buprenorphine/naloxone in primary care: results at 2-5 years. *Am J Addict.* 2008; 17(2):116-120.
- Fiellin DA, Weiss L, Botsko M, et al. Drug treatment outcomes among HIV-infected opioid-dependent patients receiving buprenorphine/naloxone. *J Acquir Immune Defic Syndr.* 2011; 56(suppl 1):S33-S38.
- Finch JW, Kamien JB, Amass L. Two-year experience with buprenorphine/naloxone (Suboxone) for maintenance treatment of opioid dependence within a private practice setting. *J Addict Med.* 2007; 1(2):104-110.
- Fingerhood MI, King VL, Brooner RK, Rastegar DA. A comparison of characteristics and outcomes of opioid-dependent patients initiating office-based buprenorphine or methadone maintenance treatment. *Subst Abus.* 2014; 35(2):122-126.
- Green CA, McCarty D, Mertens J, et al. A qualitative study of the adoption of buprenorphine for opioid addiction treatment. *J Subst Abuse Treat.* 2014; 46(3):390-401.
- Gunderson EW, Fiellin DA. Office-based maintenance treatment of opioid dependence: how does it compare with traditional approaches? *CNS Drugs.* 2008; 22(2):99-111.
- Liebschutz JM, Crooks D, Herman D, et al. Buprenorphine treatment for hospitalized, opioid-dependent patients: a randomized clinical trial. *JAMA Intern Med.* 2014; 174(8):1369-1376.
- Lucas GM, Chaudhry A, Hsu J, et al. Clinic-based treatment of opioid-dependent HIV-infected patients versus referral to an opioid treatment program: a randomized trial. *Ann Intern Med.* 2010; 152(11):704-711.
- Magura S, Lee SJ, Salsitz EA, et al. Outcomes of buprenorphine maintenance in office-based practice. *J Addict Dis.* 2007; 26(2):13-23.
- Mattick RP, Breen C, Kimber J, Davoli M. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database Syst Rev.* 2014; (2):CD002207 [Update of *Cochrane Database Syst Rev.* 2008; (2):CD002207.]
- Mauger S, Fraser R, Gill K. Utilizing buprenorphine-naloxone to treat illicit and prescription-opioid dependence. *Neuropsychiatr Dis Treat.* 2014 Apr 7; 10:587-598. Review.
- National Institute on Drug Abuse. *Topics in Brief: Medication-Assisted Treatment for Opioid Addiction.* Washington, DC: National Institutes of Health; April 2012. [Accessed at <http://www.drugabuse.gov>]
-

- Otiashvili D, Piralishvili G, Sikharulidze Z, Kamkamidze G, Poole S, Woody GE. Methadone and buprenorphine-naloxone are effective in reducing illicit buprenorphine and other opioid use, and reducing HIV risk behavior—outcomes of a randomized trial. *Drug Alcohol Depend.* 2013; 133(2):376-382.
- Parran TV, Adelman CA, Merkin B, et al. Long-term outcomes of office-based buprenorphine/naloxone maintenance therapy. *Drug Alcohol Depend.* 2010; 106(1):56-60.
- Potter JS, Marino EN, Hillhouse MP, et al. Buprenorphine/naloxone and methadone maintenance treatment outcomes for opioid analgesic, heroin, and combined users: findings from starting treatment with agonist replacement therapies (START). *J Stud Alcohol Drugs.* 2013; 74(4):605-613.
- Proctor SL, Copeland AL, Kopak AM, Herschman PL, Polukhina N. A naturalistic comparison of the effectiveness of methadone and two sublingual formulations of buprenorphine on maintenance treatment outcomes: findings from a retrospective multisite study [published online ahead of print July 28, 2014]. *Exp Clin Psychopharmacol.*
- Riksheim M, Gossop M, Clausen T. From methadone to buprenorphine: changes during a 10 year period within a national opioid maintenance treatment programme. *J Subst Abuse Treat.* 2014; 46(3):291-294.
- Saxon AJ, Hser YI, Woody G, Ling W. Medication-assisted treatment for opioid addiction: methadone and buprenorphine. *J Food Drug Anal.* 2013; 21(4):S69-S72.
- Schwartz RP, Gryczynski J, O'Grady KE, et al. Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995-2009. *Am J Public Health.* 2013; 103(5):917-922.
- Sittambalam CD, Vij R, Ferguson RP. Buprenorphine outpatient outcomes project: can Suboxone be a viable outpatient option for heroin addiction? *J Community Hosp Intern Med Perspect.* 2014 Apr 14; 4.
- Stein BD, Gordon AJ, Sorbero M, Dick A, Schuster J, Farmer C. The impact of buprenorphine on treatment of opioid dependence in a Medicaid population: recent service utilization trends in the use of buprenorphine and methadone. *Drug Alcohol Depend.* 2012; 123(1-3):72-78.
- Sullivan LE, Moore BA, Chawarski MC, et al. Buprenorphine/naloxone treatment in primary care is associated with decreased human immunodeficiency virus risk behaviors. *J Subst Abuse Treat.* 2008; 35(1):87-92.
- Suzuki J, Matthews ML, Brick D, et al. Implementation of a collaborative care management program with buprenorphine in primary care: a comparison between opioid-dependent patients and patients with chronic pain using opioids nonmedically. *J Opioid Manag.* 2014; 10(3):159-168.
- Thomas CP, Fullerton CA, Kim M, et al. Medication-assisted treatment with buprenorphine: assessing the evidence. *Psychiatr Serv.* 2014; 65(2):158-170.
- Tofighi B, Grossman E, Williams AR, Biary R, Rotrosen J, Lee JD. Outcomes among buprenorphine-naloxone primary care patients after Hurricane Sandy. *Addict Sci Clin Pract.* 2014; 9(1):3.

Weiss RD, Potter JS, Provost SE, et al. A multi-site, two-phase, Prescription Opioid Addiction Treatment Study (POATS): rationale, design, and methodology. *Contemp Clin Trials*. 2010; 31(2):189-199.

Woody G, Bruce D, Korthuis PT, et al. HIV risk reduction with buprenorphine-naloxone or methadone: findings from a randomized trial. *J Acquir Immune Defic Syndr*. 2014; 66(3):288-293

---

## BUPRENORPHINE IN THE TREATMENT OF SPECIAL POPULATIONS

- Pregnant and postpartum women
- Neonates and children
- Adolescents and young adults
- Older adults
- Active duty military and veterans
- Health care professionals
- Persons
- Persons in correctional settings and recently incarcerated individuals
- Persons engaged in nonmedical use of multiple substances
- Persons with co-occurring substance use and mental disorders
- Persons with co-occurring substance use and medical disorders

\*\*\*\*\*

### PREGNANT AND POSTPARTUM WOMEN

Chisolm MS, Fitzsimons H, Leoutsakos JM, et al. A comparison of cigarette smoking profiles in opioid-dependent pregnant patients receiving methadone or buprenorphine. *Nicotine Tob Res.* 2013; 15(7):1297-1304.

Coles LD, Lee IJ, Hassan HE, Eddington ND. Distribution of saquinavir, methadone, and buprenorphine in maternal brain, placenta, and fetus during two different gestational stages of pregnancy in mice. *Pharm Sci.* 2009; 98(8):2832-2346.

Goodman D. Buprenorphine for the treatment of perinatal opioid dependence: pharmacology and implications for antepartum, intrapartum, and postpartum care. *J Midwifery Women's Health.* 2011; 56:240-S47.

Holbrook AM, Baxter JK, Jones HE, et al. Infections and obstetric outcomes in opioid-dependent pregnant women maintained on methadone or buprenorphine. *Addiction.* 2012; 107(suppl 1):83-90.

Jansson LM. ABM clinical protocol #21: guidelines for breastfeeding and the drug-dependent woman. *Breastfeed Med.* 2009; 4(4):225-228.

Jones ES, Fiellin, DA. Women and opioid dependence treatment: office-based versus opioid treatment program-based care? *Subst Abus.* 2007; 28(2):3-8.

Jones HE, Deppen K, Hudak ML, et al. Clinical care for opioid-using pregnant and postpartum women: the role of obstetric providers. *Am J Obstet Gynecol.* 2014; 210(4):302-310.

---

Jones HE, Finnegan LP, Kaltenbach K. Methadone and buprenorphine for the management of opioid dependence in pregnancy. *Drugs*. 2012; 72(6):747-757.

Jones HE, Martin PR, Heil SH, et al. Treatment of opioid-dependent pregnant women: clinical and research issues. *J Subst Abuse Treat*. 2008; 35(3):245-259.

Kahila H, Saisto T, Kivitie-Kallio S, Haukkamaa M, Halmesmäki E. A prospective study on buprenorphine use during pregnancy: effects on maternal and neonatal outcomes. *Acta Obstet Gynecol Scand*. 2007; 86(2):185-190.

Kakko J, Heilig M, Sarman I. Buprenorphine and methadone treatment of opiate dependence during pregnancy: comparison of fetal growth and neonatal outcomes in two consecutive case series. *Drug Alcohol Depend*. 2008; 98(1-2):69-78.

Metz V, Jagsch R, Ebner N, et al. Impact of treatment approach on maternal and neonatal outcome in pregnant opioid-maintained women. *Human Psychopharmacol*. 2011; 26(6):412-421.

Meyer M, Benvenuto A, Howard D, et al. Development of a substance abuse program for opioid-dependent nonurban pregnant women improves outcome. *J Addict Med*. 2012; 6(2):124-130.

Meyer M, Paranya G, Keefer-Norris A, Howard D. Intrapartum and postpartum analgesia for women maintained on buprenorphine during pregnancy. *Eur J Pain*. 2010; 14(9):939-943.

Miller LA. Buprenorphine use in pregnancy: a survey of the knowledge and opinions of obstetricians. *Obstet Gynecol*. 2014; 123(suppl 1):71S-72S.

Minozzi S, Amato L, Bellisario C, Ferri M, Davoli M. Maintenance agonist treatments for opiate-dependent pregnant women. *Cochrane Database Syst Rev*. 2013; (12):CD006318.

Mittal L. Buprenorphine for the treatment of opioid dependence in pregnancy. *J Perinat Neonatal Nurs*. 2014; 28(3):178-184.

Mozurkewich EL, Rayburn WF. Buprenorphine and methadone for opioid addiction during pregnancy. *Obstet Gynecol Clin North Am*. 2014; 41(2):241-253.

Newman RG, Gevertz SG. Efficacy versus effectiveness of buprenorphine and methadone maintenance in pregnancy. *J Addict Dis*. 2011; 30(4):318-322.

Rizzo RA, Neumann AM, King SO, Hoey RF, Finnell DS, Blondell RD. Parenting and concerns of pregnant women in buprenorphine treatment. *MCN Am J Matern Child Nurs*. 2014; 39(5):319-324.

Sarfi M, Sundet JM, Waal H. Maternal stress and behavioral adaptation in methadone- or buprenorphine-exposed toddlers. *Infant Behav Dev*. 2013; 36(4):707-716.

Simmat-Durand L, Lejeune C, Gourarier L, for the Groupe d'Etudes Grossesse et Addictions (GEGA). Pregnancy under high-dose buprenorphine. *Eur J Obstet Gynecol Reprod Biol*. 2009; 142(2):119-123.

Soyka M. Buprenorphine use in pregnant opioid users: a critical review. *CNS Drugs*. 2013; 27(8):653-662.

---

Stanhope TJ, Gill LA, Rose C. Chronic opioid use during pregnancy: maternal and fetal implications. *Clin Perinatol*. 2013; 40(3):337-350.

## NEONATES AND CHILDREN

Agthe AG, Kim GR, Mathias KB, et al. Clonidine as an adjunct therapy to opioids for neonatal abstinence syndrome: A randomized, controlled trial. *Pediatrics*. 2009; 123(5):e849-e856.

Bartu AE, Ilett KF, Hackett LP, Doherty DA, Hamilton D. Buprenorphine exposure in infants of opioid-dependent mothers at birth. *Aust N Z Obstet Gynaecol*. 2012; 52(4):342-347.

Bell SG. Buprenorphine: a newer drug for treating neonatal abstinence syndrome. *Neonatal Netw*. 2012; 31(3):178-183.

Boyer EW, McCance-Katz EF, Marcus S. Methadone and buprenorphine toxicity in children. *Am J Addict*. 2010; 19(1):89-95.

Chisolm MS, Acquavita SP, Kaltenbach K, et al. Cigarette smoking and neonatal outcomes in depressed and nondepressed opioid-dependent agonist-maintained pregnant patients. *Addict Disord Their Treat*. 2011; 10(4):180-187.

Gower S, Bartu A, Ilett KF, Doherty D, McLaurin R, Hamilton D. The wellbeing of infants exposed to buprenorphine via breast milk at 4 weeks of age. *J Hum Lact*. 2014; 30(2):217-223.

Hayes BD, Klein-Schwartz W, Doyon S. Toxicity of buprenorphine overdoses in children. *Pediatrics*. 2008 Apr; 121(4):e782-e786.

Hytinatti T, Kahila H, Renlund M, Järvenpää A, Halmesmäki E, Kivitie-Kallio S. Neonatal outcome of 58 infants exposed to maternal buprenorphine in utero. *Acta Paediatr*. 2008; 97(8):1040-1044.

Ilett KF, Hackett LP, Gower S, Doherty D, Hamilton D, Bartu A. Estimated dose exposure of the neonate to buprenorphine and its metabolite norbuprenorphine via breastmilk during maternal buprenorphine substitution treatment. *Breastfeed Med*. 2012; 7:269-274.

Jansson LM, DiPietro JA, Velez M, et al. Fetal neurobehavioral effects of exposure to methadone or buprenorphine. *Neurotoxicol and Teratol*. 2011; 33(2):240-243.

Jansson LM, Velez M, Harrow C. The opioid-exposed newborn: assessment and pharmacologic management. *J Opioid Manag*. 2009; 5(1):47-55.

Jansson LM, Velez ML. Infants of drug-dependent mothers. *Pediatr Rev*. 2011; 32(1):5-12.

Jones HE, Dengler E, Garrison A, et al. Neonatal outcomes and their relationship to maternal buprenorphine dose during pregnancy. *Drug Alcohol Depend*. 2014; 134:414-417.

Jones HE, Kaltenbach K, Heil S, et al. Neonatal abstinence syndrome after methadone or buprenorphine exposure. *N Engl J Med*. 2010; 363(24):2320-2331.

Jones HE, Kaltenbach K, Heil SH, et al. Intrauterine abstinence syndrome (IAS) during buprenorphine inductions and methadone tapers: can we assure the safety of the fetus? *J Matern Fetal Neonatal Med*. 2012; 25(7):1197-1201.

---

Jones HE, O'Grady KE, Johnson RE, Velez M, Jansson LM. Infant neurobehavior following prenatal exposure to methadone or buprenorphine: results from the neonatal intensive care unit network neurobehavioral scale. *Subst Use Misuse*. 2010; 45(13):2244-2257.

Kocherlakota P. Neonatal abstinence syndrome. *Pediatrics*. 2014 Aug; 134(2):e547-e561. Review.

Kraft WK, Dysart K, Greenspan JS, Gibson E, Kaltenbach K, Ehrlich ME. Revised dose schema of sublingual buprenorphine in the treatment of neonatal opioid abstinence syndrome. *Addiction*. 2011; 106(3):574-580.

Lacroix I, Berrebi A, Garipuy D, et al. Buprenorphine versus methadone in pregnant opioid-dependent women: a prospective multicenter study. *Eur J Clin Pharmacol*. 2011; 67(20):1053-1059.

Lavonas EJ, Banner W, Bradt P, et al. Root causes, clinical effects, and outcomes of unintentional exposures to buprenorphine by young children. *J Pediatr*. 2013; 163(5):1377-1383.e1-e3.

Lindemalm S, Nydert P, Svensson JO, Stahle L, Sarman I. Transfer of buprenorphine into breast milk and calculation of infant drug dose. *J Hum Lact*. 2009; 25(2):199-205.

Lovegrove MC, Mathew J, Hampp C, Governale L, Wysowski DK, Budnitz DS. Emergency hospitalizations for unsupervised prescription medication ingestions by young children [published online ahead of print September 15, 2014]. *Pediatrics*.

Maguire D. Care of the infant with neonatal abstinence syndrome: strength of the evidence. *J Perinat Neonatal Nurs*. 2014; 28(3):204-211.

O'Connor AB, Collett A, Alto WA, O'Brien LM. Breastfeeding rates and the relationship between breastfeeding and neonatal abstinence syndrome in women maintained on buprenorphine during pregnancy. *J Midwifery Womens Health*. 2013; 58(4):383-388.

Sanchez ES, Bigbee JW, Fobbs W, Robinson SE, Sato-Bigbee C. Opioid addiction and pregnancy: perinatal exposure to buprenorphine affects myelination in the developing brain. *Glia*. 2008; 56(9):1017-1027.

Welle-Strand GK, Skurtveit S, Jansson LM, Bakstad B, Bjarkø L, Ravndal E. Breastfeeding reduces the need for withdrawal treatment in opioid-exposed infants. *Acta Paediatr*. 2013; 102(11):1060-1066.

Yuan Q, Rubic M, Seah J, et al; BOB Collaborative Group. Do maternal opioids reduce neonatal regional brain volumes? A pilot study [published online ahead of print June 19, 2014]. *J Perinatol*. doi:10.1038/jp.2014.111.

## **ADOLESCENTS AND YOUNG ADULTS**

Chakrabarti A, Woody GE, Griffin M, Subramaniam G, Weiss RD. Predictors of buprenorphine-naloxone dosing in a 12-week treatment trial for opioid-dependent youth: secondary analyses from a NIDA Clinical Trials Network study. *Drug Alc Depend*. 2010; 107:253-256.

Fiellin DA. Treatment of adolescent opioid dependence: no quick fix. *JAMA*. 2008; 300(17):2057-2059.

- 
- Levy S, Vaughan BL, Angulo M, Knight JR. Buprenorphine replacement therapy for adolescents with opioid dependence: early experience from a children's hospital-based outpatient treatment program. *J Adolesc Health*. 2007; 40(5):477-482.
- Matson SC, Hobson G, Abdel-Rasoul M, Bonny AE. A retrospective study of retention of opioid-dependent adolescents and young adults in an outpatient buprenorphine/naloxone clinic. *J Addict Med*. 2014; 8(3):176-182.
- Minozzi S, Amato L, Bellisario C, Davoli M. Detoxification treatments for opiate dependent adolescents. *Cochrane Database Syst Rev*. 2014; (4):CD006749.
- Minozzi S, Amato L, Bellisario C, Davoli M. Maintenance treatments for opiate-dependent adolescents. *Cochrane Database Syst Rev*. 2014; (6):CD007210.
- Moore SK, Guarino H, Marsch LA. "This is not who I want to be:" experiences of opioid-dependent youth before, and during, combined buprenorphine and behavioral treatment. *Subst Use Misuse*. 2014; 49(3):303-314.
- Norelli LJ, Smith HS, Sher L, Blackwood TA. Buprenorphine in the treatment of non-suicidal self-injury: a case series and discussion of the literature. *Int J Adolesc Med Health*. 2013; 25(3):323-330.
- Pecoraro A, Fishman M, Ma M, Piralishvili G, Woody GE. Pharmacologically assisted treatment of opioid-dependent youth. *Paediatr Drugs*. 2013; 15(6):449-458.
- Rieckmann T, Fussell H, Doyle K, Ford J, Riley K, Henderson S. Adolescent substance abuse treatment: organizational change and quality of care. *J Addict Offender Counsel*. 2011; 31(2):80-93.
- Sanchez-Samper X, Levy S. Opioid use by adolescents. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Arlington, VA: American Psychiatric Publishing, Inc.; 2011: 227-252.
- Schuman-Olivier Z, Weiss RD, Hoepfner BB, Borodovsky J, Albanese MJ. Emerging adult age status predicts poor buprenorphine treatment retention. *J Subst Abuse Treat*. 2014; 47(3):202-212.
- Subramaniam GA, Warden D, Minhajuddin A, et al. Predictors of abstinence: National Institute of Drug Abuse multisite buprenorphine/naloxone treatment trial in opioid-dependent youth. *J Am Acad Child Adolesc Psychiatry*. 2011; 50(11):1120-1128.
- Subramaniam G, Levy S, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Treatment of Opioid Dependent Adolescents and Young Adults Using Sublingual Buprenorphine*. East Providence, RI: American Academy of Addiction Psychiatry, March 27, 2010.
- Warden D, Subramaniam GA, Carmody T, et al. Predictors of attrition with buprenorphine/naloxone treatment in opioid dependent youth. *Addict Behav*. 2012; 37(9):1046-1053.
- Woody GE, Poole SA, Subramaniam G, et al. Extended vs short-term buprenorphine-naloxone for treatment of opioid-addicted youth: a randomized trial. *J Amer Med Assn*. 2008; 300(17):2003-2011.

---

**OLDER ADULTS**

Culberson JW, Ziska M. Prescription drug misuse/abuse in the elderly. *Geriatrics*. 2008; 63(9):22-31.

Han B, Gfroerer JC, Colliver JD, Penne MA. Substance use disorder among older adults in the United States in 2020. *Addiction*. 2009; 104(1):88-96.

Lofwall MR, Schuster A, Strain EC. Changing profile of abused substances by older persons entering treatment. *J Nerv Ment Dis*. 2008; 196(12):898-905.

Pergolizzi J, Boger RH, Budd K, et al. Opioids and the management of chronic severe pain in the elderly: consensus statement of an International Expert Panel with focus on the six clinically most often used WHO Step III opioids (buprenorphine, fentanyl, hydromorphone, methadone, morphine, oxycodone). *Pain Pract*. 2008; 8(4):287-313.

**ACTIVE DUTY MILITARY AND VETERANS**

Ford JH, Krahn D, Oliver KA, Kirchner J. Sustainability in primary care and mental health integration projects in Veterans Health Administration. *Qual Manag Health Care*. 2012; 21(4):240-251.

Ford JH, Krahn D, Wise M, Oliver KA. Measuring sustainability within the Veterans Administration mental health system Redesign Initiative. *Qual Manag Health Care*. 2011; 20(4):263-279.

Goodman F, Gordon A, Kivlahan D, et al. *Criteria for Use of Buprenorphine/Naloxone and Buprenorphine Sublingual Tablets*. VHA Pharmacy Benefits Management Strategic Healthcare Group. Washington, DC: Department of Veterans Affairs. June 2007.

Gordon AJ, Geppert CMA, Saxon A, et al. Models for implementing buprenorphine treatment in the VHA. *Fed Pract*. 2009; 26(5):48-57.

Gordon AJ, Kavanagh G, Krumm M, et al. Facilitators and barriers in implementing buprenorphine in the Veterans Health Administration. *Psychol Addict Behav*. 2011; 25(2):215-224.

Gordon AJ, Krumm M, for the Buprenorphine Initiative in the VA (BIV). *Buprenorphine Resource Guide, Version 8*. Washington, DC: Department of Veterans Affairs, April 2009.

Gordon AJ, Liberto J, Granda S, Salmon-Cox S, Andree T, McNicholas L. Outcomes of DATA 2000 certification trainings for the provision of buprenorphine treatment in the Veterans Health Administration. *Am J Addict*. 2008; 17(6):459-462.

Gordon AJ, Trafton JA, Saxon AJ, et al., for the Buprenorphine Work Group of the Substance Use Disorders Quality Enhancement Research Initiative. Implementation of buprenorphine in the Veterans Health Administration: results of the first 3 years. *Drug Alcohol Depend*. 2007; 90(2-3):292-296.

Hawkins EJ, Malte CA, Grossbard J, Saxon A, Imel Z, Kivlahan D. Comparative safety of benzodiazepines and opioids among veterans affairs patients with posttraumatic stress disorder. *J Addict Med*. 2013; 7(5):354-362.

---

Oliva EM, Harris AH, Trafton JA, Gordon AJ. Receipt of opioid agonist treatment in the Veterans Health Administration: facility and patient factors. *Drug Alcohol Depend.* 2012; 122(3):241-246.

Oliva EM, Trafton JA, Gordon AJ. Trends in opioid agonist therapy in the Veterans Health Administration: is supply keeping up with demand? *American Journal of Drug & Alcohol Abuse.* 2013; 39(2):103-107.

Vayalapalli S, Fareed A, Byrd-Sellers J, Stout S, Casarella J, Drexler K. Predictors of substance abuse treatment outcome in hospitalized veterans. *Am J Addict.* 2013; 22(4):358-365.

## **HEALTH CARE PROFESSIONALS**

Fiscella K. Buprenorphine maintenance therapy in opioid-addicted health care professionals returning to clinical practice. *Mayo Clin Proc.* 2012; 87(8):806 [Author reply 806-08].

Hamza H, Bryson EO. Buprenorphine maintenance therapy in opioid-addicted health care professionals returning to clinical practice: a hidden controversy. *Mayo Clin Proc.* 2012; 87(3):260-267.

## **PERSONS WHO ARE HOMELESS**

Alford DP, LaBelle CT, Richardson JM, et al. Treating homeless opioid dependent patients with buprenorphine in an office-based setting. *J Gen Int Med.* 2007; 22:171-176.

## **PERSONS IN CORRECTIONAL SETTINGS AND RECENTLY INCARCERATED INDIVIDUALS**

Ducharme LJ, Chandler RK, Wiley TR. Implementing drug abuse treatment services in criminal justice settings: introduction to the CJ-DATS study protocol series. *Health Justice.* 2013; 1(1):5.

Fox AD, Anderson MR, Bartlett G, Valverde J, Starrels JL, Cunningham CO. Health outcomes and retention in care following release from prison for patients of an urban post-incarceration transitions clinic. *J Health Care Poor Underserved.* 2014; 25(3):1139-1152.

Friedmann PD, Hoskinson R, Gordon M, et al. MAT Working Group of CJ-DATS. Medication-assisted treatment in criminal justice agencies affiliated with the criminal justice-drug abuse treatment studies (CJ-DATS): availability, barriers, and intentions. *Subst Abus.* 2012; 33(1):9-18.

Gordon MS, Kinlock TW, Couvillion KA, Wilson ME, Schwartz RP, O'Grady KE. Gender differences among prisoners with pre-incarceration heroin dependence participating in a randomized clinical trial of buprenorphine treatment. *J Offender Rehabil.* 2013; 52(5):376-391.

Gordon MS, Kinlock TW, Schwartz RP, et al. Buprenorphine treatment for probationers and parolees [published online ahead of print April 4, 2014]. *Subst Abus.*

Gordon MS, Kinlock TW, Schwartz RP, Fitzgerald TT, O'Grady KE, Vocci FJ. A randomized controlled trial of prison-initiated buprenorphine: prison outcomes and community treatment entry. *Drug Alcohol Depend.* 2014; 142:33-40.

Kinlock TW, Gordon MS, Schwartz RP, Fitzgerald TT. Developing and implementing a new prison-based buprenorphine treatment program. *J Offender Rehabil.* 2010; 49(2):91-109.

---

Lee JD, Grossman E, Truncali A, et al. Buprenorphine-naloxone maintenance following release from jail. *Subst Abus.* 2012; 33(1):40-47.

Matusow H, Dickman SL, Rich JD, et al. Medication assisted treatment in U.S. drug courts: results from a nationwide survey of availability, barriers and attitudes. *J Subst Abuse Treat.* 2013; 44(5):473-480.

Mitchell SG, Gryczynski J, Kelly SM, et al. Treatment outcomes of African American buprenorphine patients by parole and probation status. *J Drug Issues.* 2014; 44(1):69-82.

National Institute on Drug Abuse. *Principles of Drug Abuse Treatment for Criminal Justice Populations-A Research Based Guide.* (NIH Publication No. 11-5316). Washington DC: National Institutes of Health; January 2012 (revised).

Parrino MW. Providing access to treatment for opioid addiction in jails and prisons in the United States. In: Henningfield JE, Santora PB, Bickel WK, eds. *Addiction Treatment: Science and Policy for the Twenty-first Century.* Baltimore, MD: Johns Hopkins University Press; 2007: 120-125.

Perry AE, Neilson M, Martyn-St James M, et al. Interventions for female drug-using offenders. *Cochrane Database Syst Rev.* 2014; (1):CD010910.

Rich JD, McKenzie M, Dickman S, Bratberg J, Lee JD, Schwartz RP. An adverse reaction to buprenorphine/naloxone induction in prison: a case report. *Addict Disord Their Treat.* 2011; 10(4):199-200.

Springer SA, Chen S, Altice FL. Improved HIV and substance abuse treatment outcomes for released HIV-infected prisoners: the impact of buprenorphine treatment. *J Urban Health.* 2010; 87(4):592-602.

Wang EA, Moore BA, Sullivan LE, Fiellin DA. Effect of incarceration history on outcomes of primary care office-based buprenorphine/naloxone. *J Gen Intern Med.* 2010; 25(7):670-674.

Wexler H, Zehner M, Melnick G. Improving drug court operations: NIATx organizational improvement model. *Drug Court Rev.* 2012; 8(1):80-95.

## **PERSONS ENGAGED IN NONMEDICAL USE OF MULTIPLE SUBSTANCES**

Hill KP, Bennett HE, Griffin ML, et al. Association of cannabis use with opioid outcomes among opioid-dependent youth. *Drug Alcohol Depend.* 2013; 132(1-2):342-345.

McCance-Katz EF, Rainey PM, Moody DE. Effect of cocaine use on buprenorphine pharmacokinetics in humans. *Am J Addict.* 2010; 19(1):38-46.

Nahvi S, Blackstock O, Sohler NL, Thompson D, Cunningham CO. Smoking cessation treatment among office-based buprenorphine treatment patients. *J Subst Abuse Treat.* 2014; 47(2):175-179.

Schottenfeld RS, Chawarski MC, Cubells JF, George TP, Lappalainen J, Kosten TR. Randomized clinical trial of disulfiram for cocaine dependence or abuse during buprenorphine treatment. *Drug Alcohol Depend.* 2014; 136:36-42.

Scott C, Johnson K, Dennis M. Using mobile phone technology to provide recovery support for women offenders. *Telemed E-Health*. 2014 In press.

Sullivan LE, Moore BA, O'Connor PG, et al. The association between cocaine use and treatment outcomes in patients receiving office-based buprenorphine/naloxone for the treatment of opioid dependence. *Am J Addict*. 2010; 19(1):35-58.

## **PERSONS WITH CO-OCCURRING SUBSTANCE USE AND MENTAL DISORDERS**

Fareed A, Eilender P, Haber M, Bremner J, Whitfield N, Drexler K. Comorbid posttraumatic stress disorder and opiate addiction: a literature review. *J Addict Dis*. 2013; 32(2):168-179.

Griffin ML, Dodd DR, Potter JS, et al. Baseline characteristics and treatment outcomes in prescription opioid dependent patients with and without co-occurring psychiatric disorder. *Am J Drug Alcohol Abuse*. 2014; 40(2):157-162.

Liddell MB, Aziz V, Briggs P, Kanakkehewa N, Rawi O. Buprenorphine augmentation in the treatment of refractory obsessive-compulsive disorder. *Ther Adv Psychopharmacol*. 2013; 3(1):15-19.

McCance-Katz EF. Psychiatric comorbidity. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Washington, DC: American Psychiatric Publishing, Inc.; 2011.

## **PERSONS WITH CO-OCCURRING SUBSTANCE USE AND MEDICAL DISORDERS**

Alford DP. Management of acute and chronic pain. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Washington, DC: American Psychiatric Publishing, Inc.; 2011.

Alford DP, LaBelle CT, Kretsch N, et al. Collaborative care in opioid-addicted patients in primary care using buprenorphine. *Arch Intern Med*. 2011; 171(5):425-431.

Altice FL, Bruce RD, Lucas GM, et al. HIV treatment outcomes among HIV-infected, opioid-dependent patients receiving buprenorphine/naloxone treatment within HIV clinical care settings: results from a multisite study. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1): S22-S32.

Bounes V, Palmaro A, Lapeyre-Mestre M, Roussin A. Long-term consequences of acute pain for patients under methadone or buprenorphine maintenance treatment. *Pain Physician*. 2013; 16(6):E739-E747.

Bruce RD, Altice FL. Case series on the safe use of buprenorphine/naloxone in individuals with acute hepatitis C infection and abnormal hepatic liver transaminases. *Am J Drug Alcohol Abuse*. 2007; 33(6):869-874.

Bruce RD, Kresina TF, McCance-Katz EF. Medication-assisted treatment and HIV/AIDS: aspects in treating HIV-infected drug users. *AIDS*. 2010; 24(3):331-340.

Chaudhry AA, Botsko M, Weiss L, et al. Participant characteristics and HIV risk behaviors among individuals entering integrated buprenorphine/naloxone and HIV care. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S14-S21.

- 
- Chern SY, Isserman R, Chen L, Ashburn M, Liu R. Perioperative pain management for patients on chronic buprenorphine: a case report. *J Anesth Clin Res*. 2013; 3(250).
- DiFrancesco R, Fischl MA, Donnelly J, et al. Buprenorphine assay and plasma concentration monitoring in HIV-infected substance users. *J Pharm Biomed Anal*. 2007; 44(1):188-195.
- Edelman EJ, Chantarat T, Caffrey S, et al. The impact of buprenorphine/naloxone treatment on HIV risk behaviors among HIV-infected, opioid-dependent patients. *Drug Alcohol Depend*. 2014; 139:79-85.
- Edelman EJ, Dinh AT, Moore BA, Schottenfeld RS, Fiellin DA, Sullivan LE. Human immunodeficiency virus testing practices among buprenorphine-prescribing physicians. *J Addict Med*. 2012; 6(2):159-165.
- Egan JE, Netherland J, Gass J, Finkelstein R, Weiss L. Patient perspectives on buprenorphine/naloxone treatment in the context of HIV care. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S46-S53.
- Huxtable CA, Macintyre PE. An alternative way of managing acute pain in patients who are in buprenorphine opioid substitution therapy programs. *Eur J Anaesthesiol*. 2013; 30(11):717-718.
- Korthuis PT, Fiellin DA, Fu R, et al. Improving adherence to HIV quality of care indicators in persons with opioid dependence: the role of buprenorphine. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S83-S90.
- Korthuis PT, Tozzi MJ, Nandi V, et al. Improved quality of life for opioid-dependent patients receiving buprenorphine treatment in HIV clinics. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S39-S45.
- Masson CL, Rainey PM, Moody DE, McCance-Katz EF. Effects of HCV seropositive status on buprenorphine pharmacokinetics in opioid-dependent individuals. *Am J Addict*. 2014; 23(1):34-40.
- Pade PA, Cardon KE, Hoffman RM, Geppert CM. Prescription opioid abuse, chronic pain, and primary care: a co-occurring disorders clinic in the chronic disease model. *J Subst Abuse Treat*. 2012; 43(4):446-450.
- Potter JS, Chakrabarti A, Domier CP, Hillhouse MP, Weiss RD, Ling W. Pain and continued opioid use in individuals receiving buprenorphine-naloxone for opioid detoxification: secondary analyses from the Clinical Trials Network. *J Subst Abuse Treat*. 2010; 38(suppl 1):S80-S86.
- Schwarz RK, Bruce RD, Ball SA, Herme M, Altice FL. Comparison of tuberculin skin testing reactivity in opioid-dependent patients seeking treatment with methadone versus buprenorphine: policy implications for tuberculosis screening. *Am J Drug Alcohol Abuse*. 2009; 35(6):439-444.
- Sullivan LE, Moore BA, Chawarski MC, et al. Buprenorphine/naloxone treatment in primary care is associated with decreased human immunodeficiency virus risk behaviors. *J Subst Abuse Treat*. 2008; 35(1):87-92.
- Tetrault JM, Sullivan LE, Fiellin DA. Medical management. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence*. Arlington, VA: American Psychiatric Publishing, Inc.; 2011: 191-211.
-

Vergara-Rodriguez P, Tozzi MJ, Botsko M, et al. Hepatic safety and lack of antiretroviral interactions with buprenorphine/naloxone in HIV-infected opioid-dependent patients. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S62-S67.

Weiss L, Egan JE, Botsko M, Netherland J, Fiellin DA, Finkelstein R. The BHIVES collaborative: organization and evaluation of a multisite demonstration of integrated buprenorphine/naloxone and HIV treatment. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S7-S13.

Weiss LJ, Netherland, Egan JE, et al. Integration of buprenorphine/naloxone treatment into HIV clinical care: lessons from the BHIVES collaborative. *J Acquir Immune Defic Syndr*. 2011; 56(suppl 1):S68-S75.

Woody GE, Bruce D, Korthuis PT, et al. HIV risk reduction with buprenorphine-naloxone or methadone: findings from a randomized trial. *J Acquir Immune Defic Syndr*. 2014; 66(3)288-293.

## PREVENTING AND RESPONDING TO BUPRENORPHINE DIVERSION AND ABUSE

- Characteristics and consequences of buprenorphine diversion and abuse
- Prevention and/or intervention for buprenorphine diversion and abuse

\*\*\*\*\*

### CHARACTERISTICS AND CONSEQUENCES OF BUPRENORPHINE DIVERSION AND ABUSE

Alho H, Sinclair D, Vuori E, Holopainen A. Abuse liability of buprenorphine-naloxone tablets in untreated IV drug users. *Drug Alcohol Depend.* 2007; 88(1):75-78.

Atluri S, Sudarshan G, Manchikanti L. Assessment of the trends in medical use and misuse of opioid analgesics from 2004 to 2011. *Pain Physician.* 2014; 17(2):E119-E128.

Cicero TJ, Ellis MS, Surratt HL, Kurtz SP. Factors contributing to the rise of buprenorphine misuse: 2008-2013. *Drug Alcohol Depend.* 2014; 142:98-104.

Cicero TJ, Surratt HL, Inciardi J. Use and misuse of buprenorphine in the management of opioid addiction. *J Opioid Manag.* 2007; 3(6):302-308.

Connors NJ, Hoffman RS. Comments on "Medical Outcomes Associated with Nonmedical Use of Methadone and Buprenorphine." *J Emerg Med.* 2014; 47(3):326-327.

Daniulaityle R, Falck R, Carlson RG. Illicit use of buprenorphine in a community sample of young adult non-medical users of pharmaceutical opioids. *Drug Alcohol Depend.* 2012; 122(3):201-207.

Drug Enforcement Administration, Office of Diversion Control. *National Forensic Laboratory Information System Special Report: Methadone and Buprenorphine, 2003-2008.* Washington, DC: Drug Enforcement Administration, U.S. Department of Justice, October 2009.

Genberg BL, Gillespie M, Schuster CR, et al. Prevalence and correlates of street-obtained buprenorphine use among current and former injectors in Baltimore, Maryland. *Addict Behav.* 2013; 38(12):2868-2873.

Häkkinen M, Heikman P, Ojanperä I. Parenteral buprenorphine-naloxone abuse is a major cause of fatal buprenorphine-related poisoning. *Forensic Sci Int.* 2013; 232(1-3):11-15.

Havnes IA, Clausen T, Middelthon AL. "Diversion" of methadone or buprenorphine: "harm" versus "helping." *Harm Reduct J.* 2013; 10:24.

Johnson CE, Arfken CL, DiMenza S, et al. Diversion and abuse of buprenorphine: findings from national surveys of treatment patients and physicians. *Drug Alcohol Depend.* 2012; 120(1-3):190-195.

---

Larance B, Lintzeris N, Ali R, et al. The diversion and injection of a buprenorphine-naloxone soluble film formulation. *Drug Alcohol Depend.* 2014; 136:21-27.

Lavonas EJ, Severtson SG, Martinez EM, et al. Abuse and diversion of buprenorphine sublingual tablets and film. *J Subst Abuse Treat.* 2014; 47(1):27-34.

Lee SC, Klein-Schwartz W, Doyon S, Welsh C. Comparison of toxicity associated with nonmedical use of benzodiazepines with buprenorphine or methadone. *Drug Alcohol Depend.* 2014; 138:118-123.

Martin J, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Adherence, Diversion, and Misuse of Sublingual Buprenorphine.* East Providence, RI: American Academy of Addiction Psychiatry; January 5, 2010.

Maxwell JC, McCance-Katz EF. Indicators of buprenorphine and methadone use and abuse: what do we know? *Am J Addict.* 2010; 19(1):73-88.

Middleton LS, Nuzzo PA, Lofwall MR, Moody DE, Walsh SL. The pharmacodynamic and pharmacokinetic profile of intranasal crushed buprenorphine and buprenorphine/naloxone tablets in opioid abusers. *Addiction.* 2011; 106(8):1460-1473.

Monte AA, Mandell T, Wilford BB, Tennyson J, Boyer EW. Diversion of buprenorphine/naloxone coformulated tablets in a region with high prescribing prevalence. *J Addict Dis.* 2009; 28(3):226-231.

Nielsen S, Dietze P, Lee N, Dunlop A, Taylor D. Concurrent buprenorphine and benzodiazepines use and self-reported opioid toxicity in opioid substitution treatment. *Addiction.* 2007; 102(4):616-622.

Schuman-Olivier Z, Connery H, Griffin ML, et al. Clinician beliefs and attitudes about buprenorphine/naloxone diversion. *Am J Addict.* 2013; 22(6):574-580.

Smith MY, Bailey JE, Woody GE, Kleber HD. Abuse of buprenorphine in the United States: 2003-2005. *J Addict Dis.* 2007; 26(3):107-111.

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. *The DAWN Report: Emergency Department Visits Involving Buprenorphine.* Rockville, MD: Substance Abuse and Mental Health Services Administration; January 29, 2013.

Surratt HL, O'Grady C, Kurtz SP, et al. Reductions in prescription opioid diversion following recent legislative interventions in Florida. *Pharmacoepidemiol Drug Saf.* 2014; 23(3):314-320.

Williams AR, Tofighi B, Rotrosen J, Lee JD, Grossman E. Psychiatric comorbidity, red flag behaviors, and associated outcomes among office-based buprenorphine patients following Hurricane Sandy. *J Urban Health.* 2014; 91(2):366-375.

Wish ED, Artigiani E, Billing A, et al. The emerging buprenorphine epidemic in the United States. *J Addict Dis.* 2012; 31(1):3-7.

Yokell MA, Zaller D, Green TC, Rich JD. Buprenorphine and buprenorphine/naloxone diversion, misuse, and illicit use: an international review. *Curr Drug Abuse Rev.* 2011; 4:28-41.

---

**PREVENTION AND/OR INTERVENTION FOR BUPRENORPHINE DIVERSION AND ABUSE**

Clark RE, Baxter JD. Responses of state Medicaid programs to buprenorphine diversion: doing more harm than good? *JAMA Intern Med.* 2013; 173(17):1571-1572.

Jones JD, Sullivan MA, Vosburg SK, et al. Abuse potential of intranasal buprenorphine versus buprenorphine/naloxone in buprenorphine-maintained heroin users [published online ahead of print July 25, 2014]. *Addict Biol.* doi:10.1111/adb.12163.

Lofwall MR, Walsh SL. Clinical challenges in managing buprenorphine diversion. *J Addict Med.* 2010; 4(4):243.

Lofwall MR, Wunsch MJ, Nuzzo PA, Walsh SL. Efficacy of continuing medical education to reduce the risk of buprenorphine diversion. *J Subst Abuse Treat.* 2011; 41(3):321-329.

Lofwall MR, Wunsch MJ, Walsh SL. Pharmacy willingness to partner with office-based opioid dependence treatment providers in conducting random buprenorphine pill counts. *Am J Addict.* 2010; 19(2):195-196.

Martin J, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Adherence, Diversion and Misuse of Sublingual Buprenorphine.* East Providence, RI: American Academy of Addiction Psychiatry, Jan. 5, 2010.

Otiashvili D, Piralishvili G, Sikharulidze Z, Kamkamidze G, Poole S, Woody GE. Methadone and buprenorphine-naloxone are effective in reducing illicit buprenorphine and other opioid use, and reducing HIV risk behavior--outcomes of a randomized trial. *Drug Alcohol Depend.* 2013; 133(2):376-382.

Sherman SG, Han J, Welsh C, Chaulk P, Serio-Chapman C. Efforts to reduce overdose deaths. *Am J Public Health.* 2013; 103(8):e1-e2.

## ACCESS TO TREATMENT WITH BUPRENORPHINE

- Federal regulations
- State medical board policies and legislative actions
- Costs and cost-effectiveness of treatment with buprenorphine
- Health insurance coverage and financing issues
- Factors in physicians' acquisition of DATA 2000 waivers and prescribing of buprenorphine
- Facilitators of, and barriers to, use of buprenorphine in primary care
- Innovative approaches and model programs
- Strategies to address workforce issues

\*\*\*\*\*

### FEDERAL REGULATIONS

Drug Enforcement Administration (DEA). Authority for practitioners to dispense or prescribe approved narcotic controlled substances for maintenance or detoxification treatment. Final Rule. *Fed Regist.* 2005 Jun 23; 70(120):36338-36344.

Drug Enforcement Administration (DEA). Changes to patient limitation for dispensing or prescribing approved narcotic controlled substances for maintenance or detoxification treatment by qualified individual practitioners. Final rule. *Fed Regist.* 2008 May 22; 73(100):29685-29688.

Drug Enforcement Administration (DEA). *Recordkeeping and Security Requirements for Controlled Substances*. Washington, DC: DEA, Department of Justice; no date.

Salsitz EA, Wunsch MJ, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Drug Enforcement Administration Requirements for Prescribers and Dispensers of Buprenorphine and Buprenorphine/Naloxone*. East Providence, RI: American Academy of Addiction Psychiatry, January 25, 2010.

Saxon AJ, for the Physician Clinical Support System for Buprenorphine (PCSS-B). *PCSS-B Guidance on Psychosocial Aspects of Treatment in Patients Receiving Buprenorphine/Naloxone*. East Providence, RI: American Academy of Addiction Psychiatry; Feb. 22, 2008.

Substance Abuse and Mental Health Services Administration. Opioid drugs in maintenance and detoxification; dispensing restrictions for buprenorphine and buprenorphine combination as used in approved opioid treatment medications. Final rule. *Fed Regist.* 2012 Dec 6; 77(235):72752-72761.

### STATE MEDICAL BOARD POLICIES AND LEGISLATIVE ACTIONS

Baehren DF, Marco CA, Droz DE, Sinha S, Callan E, Akpunonu P. A statewide prescription monitoring program affects emergency department prescribing behaviors. *Ann Emerg Med.* 2010; 56(1):19-23.

---

Clark RE, Baxter, JD Responses of state Medicaid programs to buprenorphine diversion: doing more harm than good? *JAMA Intern Med.* 2013; 173(17):1571-1572.

Ducharme LJ, Abraham AJ. State policy influence on the early diffusion of buprenorphine in community treatment programs. *Subst Abuse Treat Prev Policy.* 2008; 3:17.

Federation of State Medical Boards. *Model Policy on DATA 2000 and the Treatment of Opioid Addiction in the Medical Office.* Euless, TX: The Federation; 2013a.

Federation of State Medical Boards. *Model Policy on the Use of Analgesics in the Treatment of Chronic Pain.* Euless, TX: The Federation; 2013b.

Knudsen HK, Abraham AJ. Perceptions of the state policy environment and adoption of medications in the treatment of substance use disorders. *Psychiatric Serv.* 2012; 63(1):19-24.

Ohio Department of Alcohol and Drug Addiction Services. *Low Dose Protocol for the Use of Buprenorphine and Suboxone.* 2012 [accessed online at <http://www.odadas.ohio.gov/public/ContentLinks.aspx?SectionID=e7c37d02-288f-4c68-a51d-3807c218a0a1>].

Rieckmann T, Kovas AE, Ruthkowski BA. Adoption of medications in substance abuse treatment: Priorities and strategies of single state authorities. *J Psychoactive Drugs.* 2010; (suppl 6):227-238.

Stein BD, Gordon AJ, Sorbero MJ, Dick A, Schuster J, Farmer C. The impact of buprenorphine on treatment of opioid dependence in a Medicaid population: Recent service utilization trends in the use of buprenorphine and methadone. *Drug Alcohol Depend.* 2012; 123(1-3):72-78.

## **COSTS AND COST-EFFECTIVENESS OF TREATMENT WITH BUPRENORPHINE**

Barnett PG. Comparison of costs and utilization among buprenorphine and methadone patients. *Addiction.* 2009; 104:982-992.

Baser O, Chalk M, Fiellin DA, Gastfriend DR. Cost and utilization outcomes of opioid-dependence treatments. *Am J Manage Care.* 2011; 17(8):S235-S248.

CADTH Rapid Response Reports. Suboxone versus Methadone for the Treatment of Opioid Dependence: A Review of the Clinical and Cost-effectiveness [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2013 Nov 14.

Chalk M, Alanis-Hirsch K, Woodworth A, Kemp J, McLellan T. *FDA Approved Medications for the Treatment of Opiate Dependence: Literature Reviews on Effectiveness and Cost-Effectiveness* (Report prepared for the American Society of Addiction Medicine). Philadelphia, PA: Treatment Research Institute; 2013a.

Clay E, Khemiri A, Zah V, Aballéa S, Ruby J, Asche CV. Persistence and healthcare utilization associated with the use of buprenorphine/naloxone film and tablet formulation therapy in adults with opioid dependence. *J Med Econ.* 2014; 17(9):626-636.

Connock M, Juarez-Garcia A, Jowett S, et al. Methadone and buprenorphine for the management of opioid dependence: a systematic review and economic evaluation. *Health Technol Assess.* 2007; 11(9):1-171.

Lynch FL, McCarty D, Mertens J, et al. Costs of care for persons with opioid dependence in commercial insurance. *Alcohol Depend.* 2013; 133(2):494-501.

Metzger DS, Zhang Y. Drug treatment as HIV prevention: expanding treatment options. *Curr HIV/AIDS Rep.* 2010; 7(4):220-225.

Polsky D, Glick HA, Yang J, Subramaniam GA, Poole SA, Woody GE. Cost-effectiveness of extended buprenorphine–naloxone treatment for opioid-dependent youth: data from a randomized trial. *Addiction.* 2010; 105(9):1616-1624.

Schackman BR, Leff JA, Botsko M, et al. The cost of integrated HIV care and buprenorphine/naloxone treatment: results of a cross-site evaluation. *J Acquir Immune Defic Syndr.* 2011; 56(suppl 1):S76-S82.

Schackman BR, Leff JA, Polsky D, Moore BA, Fiellin DA. Cost-effectiveness of long-term outpatient buprenorphine-naloxone treatment for opioid dependence in primary care. *J Gen Intern Med.* 2012; 7(6):669-676.

Tkacz J, Volpicelli J, Un H, Ruetsch C. Relationship between buprenorphine adherence and health service utilization and costs among opioid dependent patients. *J Subst Abuse Treat.* 2014; 46(4):456-462.

## HEALTH INSURANCE COVERAGE AND FINANCING ISSUES

Austvoll-Dahlgren A, Aaserud M, Vist G, et al. Pharmaceutical policies: effects of cap and co-payment on rational drug use. *Cochrane Database Syst Rev.* 2008; (1):CD007017.

Barry CL, Huskamp HA. Moving beyond parity: mental health and addiction care under the ACA. *NEJM.* 2011; 365(11):973-974.

Baxter JD, Clark RE, Samnaliev M, Leung GY, Hashemi L. Factors associated with Medicaid patients' access to buprenorphine treatment. *J Subst Abuse Treat.* 2011; 41(1):88-96.

Becker WC, Fiellin DA, Merrill JO, et al. Opioid use disorder in the United States: insurance status and treatment access. *Drug Alcohol Depend.* 2008; 94(1-3):207-213.

Buck, JA. The looming expansion and transformation of public substance abuse treatment under the Affordable Care Act. *Health Aff. (Millwood).* 2011; 30(8):1402-1410.

Chalk M, Alanis-Hirsch K, Woodworth A, Mericle A, Curtis B, McLoyd K. *Report of Commercial Health Plan Medication Coverage and Benefits Survey* (Report prepared for the American Society of Addiction Medicine). Philadelphia, PA: Treatment Research Institute; 2013b.

Clark RE, Baxter JD, Barton BA, Aweh G, O'Connell E, Fisher WH. The impact of prior authorization on buprenorphine dose, relapse rates, and cost for Massachusetts Medicaid beneficiaries with opioid dependence [published online ahead of print July 9, 2014]. *Health Serv Res.* doi:10.1111/1475-6773.12201.

Cunningham CO, Giovanniello A, Sacajiu G, et al. Buprenorphine treatment in an urban community health center: what to expect. *Fam Med.* 2008; 40(7):500-506.

---

Dunn JD. Economic considerations for the treatment of opioid and alcohol dependence: a managed care perspective. *Am J Managed Care*. 2011; 17(8):S1-S2.

Horgan CM, Reif S, Hodgkin D, Garnick DW, Merrick EL. Availability of addiction medications in private health plans. *J Subst Abuse Treat*. 2008; 34(2):147-151.

Jansson LM, Svikis DS, Velez M, Fitzgerald E, Jones HE. The impact of managed care on drug-dependent pregnant and postpartum women and their children. *Subst Use Misuse*. 2007; 42(6):961-974.

Kennedy J, Dipzinski A, Roll J, Coyne J, Blodgett E. Medicare prescription drug plan coverage of pharmacotherapies for opioid and alcohol dependence in WA. *Drug Alcohol Depend*. 2011; 114(2-3):201-206.

Knopf A. NIATx collaboratives offer seven strategies for better billing. *Behav Healthc*. 2013; 33(5):42-43.

Knudsen HK, Abraham AJ, Oser CB. Barriers to the implementation of medication-assisted treatment for substance use disorders: the importance of funding policies and medical infrastructure. *Eval Prog Planning*. 2011; 34:375-381.

Rinaldo SG, Rinaldo DW. *Availability Without Accessibility? State Medicaid Coverage and Authorization Requirements for Opioid Dependence Medications* (Report prepared for the American Society of Addiction Medicine). San Francisco, CA: The Avisa Group; 2013.

Schackman BR, Leff JA, Polsky D, Moore BA, Fiellin DA. Cost-effectiveness of long-term outpatient buprenorphine-naloxone treatment for opioid dependence in primary care. *J Gen Intern Med*. 2012; 27(6):669-676.

Wisniewski AM, Dlugosz MR, Blondell RD. Reimbursement and practice policies among providers of buprenorphine-naloxone treatment. *Subst Abus*. 2013; 34(2):105-107.

## **FACTORS IN PHYSICIANS' ACQUISITION OF DATA 2000 WAIVERS AND PRESCRIBING OF BUPRENORPHINE**

Albright J, Ciaverelli R, Essex A, Tkacz J, Ruetsch C. Psychiatrist characteristics that influence use of buprenorphine medication-assisted treatment. *J Addict Med*. 2010; 4(4):197-203.

Arfken CL, Johanson CE, DiMenza S, Schuster CW. Expanding treatment capacity for opioid dependence with office-based treatment with buprenorphine: national surveys of physicians. *J Sub Abuse Treatment*. 2010; 39:96-104.

Becker WC, Fiellin DA. Provider satisfaction with office-based treatment of opioid dependence. *Sub Abuse*. 2005; 26(1):15-22.

Center for Substance Abuse Treatment. *Determinations Report: A Report on the Physician Waiver Program Established by the Drug Addiction Treatment Act of 2000 ("DATA")*. Rockville, MD: CSAT, Substance Abuse and Mental Health Services Administration; 2006.

Cunningham CO, Kunins HV, Roose RJ, Elam RT, Sohler NL. Barriers to obtaining waivers to prescribe buprenorphine for opioid addiction treatment among HIV physicians. *J Gen Intern Med.* 2007; 22(9):1325-1329.

Egan JE, Casadonte P, Gateman T, et al. The Physician Clinical Support System—Buprenorphine (PCSS-B): a novel project to expand/improve buprenorphine treatment. *J Gen Intern Med.* 2010; 25(9):936-941.

Knudsen JH, Roman PM. Financial factors and the implementation of medications for treating opioid use disorders. *J Addict Med.* 2012; 6(4):280-286.

Mark TL, Kassed CA, Vandivort-Warren R, Levit KR, Kranzler HR. Alcohol and opioid dependence medications: prescription trends, overall and by physician specialty. *Drug Alcohol Depend.* 2009; 99:345-349.

McKenna MK, Richart S, Tyler S. Impact of educational interventions on physician performance and patient outcomes. *CE Meas.* 2008; (2):2-6.

Meier BR, Patkar AA. Buprenorphine treatment: factors and first-hand experiences for providers to consider. *J Addict Dis.* 2007; 26(1):3-14.

Netherland J, Botsko M, Egan JE, et al. Factors affecting willingness to provide buprenorphine treatment. *J Subst Abuse Treat.* 2009; 36(3):244-251.

Suzuki J. Logistics of office-based buprenorphine treatment. In: JA Renner, Jr. & P Levounis, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence.* Washington, DC: American Psychiatric Publishing, Inc.; 2011.

Suzuki J, Connery HS, Ellison TV, Renner JA. Preliminary survey of office-based opioid treatment practices and attitudes among psychiatrists never receiving buprenorphine training to those who received training during residency [published online ahead of print July 25, 2014]. *Am J Addict.* doi:10.1111/j.1521-0391.2014.12143.x.

## **FACILITATORS OF, AND BARRIERS TO, USE OF BUPRENORPHINE IN PRIMARY CARE**

Alford DP, LaBelle CT, Kretsch N, et al. Collaborative care in opioid-addicted patients in primary care using buprenorphine: five year patient experience. *Arch Intern Med.* 2011; 171(5):425-431.

Arfken CL, Johanson CE, DiMenza S, Schuster CR. Expanding treatment capacity for opioid dependence with office-based treatment with buprenorphine: national surveys of physicians. *J Sub Abuse Treat.* 2010; 39:96-104.

Becker WC, Fiellin DA. Provider satisfaction with office-based treatment of opioid dependence. *Sub Abuse.* 2005; 26(1):15-22.

Fiellin DA. Experience with buprenorphine in the United States, 2002-2008. In: Renner JA Jr, Levounis P, eds. *Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence.* Arlington, VA: American Psychiatric Publishing, Inc.; 2011: 27-43.

---

Fiellin DA. The first three years of buprenorphine in the United States: experience to date and future directions. *J Addict Med.* 2007; 1(2):62-67.

Fitzgerald J, McCarty D. Understanding attitudes toward use of medication in substance abuse treatment: a multilevel approach. *Psychol Serv.* 2009; 6(1):74-84.

Gunderson EW, Fiellin DA. Office-based maintenance treatment of opioid dependence: how does it compare with traditional approaches? *CNS Drugs.* 2008; 22(2):99-111.

Green CA, McCarty D, Mertens J, et al. A qualitative study of the adoption of buprenorphine for opioid addiction treatment. *J Subst Abuse Treat.* 2014; 46(3):390-401.

Hutchinson E, Catlin M, Andrilla CH, Baldwin LM, Rosenblatt RA. Barriers to primary care physicians prescribing buprenorphine. *Ann Fam Med.* 2014; 12(2):128-133.

Jones HE. Practical considerations for the clinical use of buprenorphine. *Sci Pract Perspect.* 2004; 2(2):4-20. Review.

Kissin W, McLeod C, Sonnefeld J, Stanton A. Experiences of a national sample of qualified addiction specialists who have and have not prescribed buprenorphine for opioid dependence. *J Addict Dis.* 2006; 25(4):91-103.

Knudsen HK, Abraham AJ, Roman PM. Adoption and implementation of medications in addiction treatment programs. *J Addict Med.* 2011; 5(1):21-27.

Korthius PT, Gregg J, Rogers WE, McCarty D, Nicolaidis C, Boverman J. Patients' reasons for choosing office-based buprenorphine: preference for patient-centered care. *J Addict Med.* 2010; 4(4):204-210.

Kunins HV, Sohler NL, Giovanniello A, Cunningham CO. A buprenorphine education and training program for primary care residents: implementation and evaluation. *Subst Abuse.* 2013; 34(3):242-247.

Kvamme E, Catlin M, Banta-Green C, Roll, J, Rosenblatt R. Who prescribes buprenorphine for rural patients? The impact of specialty, location, and practice type in Washington State. *J Subst Abuse Treat.* 2013; 44(3):355-360.

Ling W, Jacobs P, Hillhouse M, et al. From research to the real world: buprenorphine in the decade of the Clinical Trials Network. *Journal of Substance Abuse Treatment.* 2010; 38(suppl 1):S53-S60.

McCarty D, Rieckmann T, Green C, Gallon S, Knudsen J. Training rural practitioners to use buprenorphine: using The Change Book to facilitate technology transfer. *J Subst Abuse Treat.* 2004; 26:203-208.

McIntosh L. *Medication-Assisted Treatment, Part 3: Implementation Challenges and Strategies.* Seattle, WA: Northwest Frontier Addiction Technology Transfer Center; 2012.

Meier BR, Patkar AA. Buprenorphine treatment: factors and first-hand experiences for providers to consider. *J Addict Dis.* 2007; 26:3-14.

---

Mintzer I, Eisenberg M, Terra M, MacVane C, Himmelstein D, Woolhandler S. Treating opioid addiction with buprenorphine-naloxone in community-based primary care settings. *Ann Fam Med*. 2007; 5(2):146-150.

Oliva EM, Maisel NC, Gordon AJ, Harris A. Barriers to use of pharmacotherapy for addiction disorders and how to overcome them. *Curr Psychiatry Rep*. 2011; 13(5):374-381.

Olsen Y, Sharfstein JM. Confronting the stigma of opioid use disorder--and its treatment. *JAMA: The Journal of the American Medical Association*. 2014; 311(14):1393-1394.

Pergolizzi JV, Ben-Joseph R, Chang CL, Hess G. US practitioner prescribing practices and patient characteristics of those newly treated with a buprenorphine transdermal patch system. *Curr Med Res Opin*. 2014; 30(8):1579-1587.

Quest TL, Merrill JO, Roll J, Saxon AJ, Rosenblatt R. Buprenorphine therapy for opioid addiction in rural Washington: the experience of the early adopters. *Journal Of Opioid Management*. 2012; 8(1):29-38.

Reif S, Thomas CP, Wallack S. Factors determining how early adopter physicians use buprenorphine in treatment. *Journal of Addiction Medicine* 2007; 1(4):205-212.

Rieckmann T, Daley M, Fuller B, Thomas C, McCarty D. Client and counselor attitudes toward the use of medications for treatment of opioid dependence. *Journal of Substance Abuse Treatment*. 2007; 32(2):207-215.

Roman PM, Abraham AJ, Knudsen HK. Using medication-assisted treatment for substance use disorders: Evidence of barriers and facilitators of implementation. *Addict Behav*. 2011; 36(6):584-589.

Sigmon S. Access to treatment for opioid dependence in rural America: challenges and future directions. *JAMA Psychiatry*. 2014; 71(4):359-360.

Stein MD, Bailey GL, Thurmond P, Paull N. Looking for the uninsured in Massachusetts? Check opioid dependent persons seeking detoxification. *Drug and Alcohol Dependence*. 2014; 136:166-169.

Stover H. Barriers to opioid substitution access, entry and retention: A survey of opioid users, patients in treatment, and treating and non-treating physicians. *Eur Addict Res*. 2011; 17(1):44-54.

Thomas CP, Reif S, Haq S, Wallack S, Hoyt A, Ritter G. Use of buprenorphine for addiction treatment: perspectives of addiction specialists and general psychiatrists. *Psychiatric Services*. 2008; 59(8):909-916.

Walley A, Alperen J, Cheng D, et al. Office-based management of opioid dependence with buprenorphine: clinical practices and barriers. *J Gen Intern Med*. 2008; 23(9):1393-1398.

Weber EM. Failure of physicians to prescribe pharmacotherapies for addiction: Regulatory restrictions and physician resistance. *J Health Care Law Policy*. 2010; 13:49-76.

---

**INNOVATIVE APPROACHES AND MODEL PROGRAMS**

Barry DT, Irwin KS, Jones ES, et al. Integrating buprenorphine treatment into office-based practice: a qualitative study. *J Gen Intern Med.* 2009; 24(2):218-225.

Basu S, Smith-Rohrberg D, Bruce RD. Models for integrating buprenorphine therapy into the primary HIV care setting. *Clin Infect Dis.* 2006; 42:716-721.

Cheever LW, Kresina TF, Cajina A, Lubran R. A model federal collaborative to increase patient access to buprenorphine treatment in HIV primary care. *J Acquir Immune Defic Syndr.* 2011; 56(suppl 1):S3-S6.

Cunningham CO, Sohler NL, Cooperman N, Berg K, Litwin A, Arnsten J. Strategies to improve access to and utilization of health care services and adherence to antiretroviral therapy among HIV-infected drug users. *Subst Use Misuse.* 2011; 46(2-3):218-232.

Daniels AM, Salisbury-Afshar E, Hoffberg A, Agus D, Fingerhood MI. A novel community-based buprenorphine program: client description and initial outcomes. *J Addict Med.* 2014; 8(1):40-46.

DeMaria PA, Patkar AA. The implementation of buprenorphine/naloxone in college health practice. *J Am Coll Health.* 2008; 56(4):391-393. Review.

Egan JE, Casadonte P, Gartenmann T, et al. The Physician Clinical Support System-Buprenorphine (PCSS-B): a novel project to expand/improve buprenorphine treatment. *J Gen Intern Med.* 2010; 25(9):936-941.

Gryczynski J, Jaffe JH, Schwartz R, et al. Patient perspectives on choosing buprenorphine over methadone in an urban, equal-access system. *The American Journal on Addictions.* 2013; 22(3):285-291.

Gustafson DH, Quanbeck AR, Robinson JM, et al. Which elements of improvement collaboratives are most effective? A cluster-randomized trial. *Addiction.* 2013; 108:1145-1157.

Johnson KA, Ford JH, McCluskey M. Promoting new practices to increase access to and retention in addiction treatment: an analysis of five communication channels. *Addict Behav.* 2012; 37(11):1193-1197.

Knudsen HK, Ducharme LJ, Roman PM. The adoption of medications in substance abuse treatment: associations with organizational characteristics and technology clusters. *Drug Alcohol Depend.* 2007; 87(2-3):164-174.

Marsch LA, Gustafson DH. The role of technology in health care innovation: A commentary. *J Dual Diagn.* 2013; 9(1):101-103.

Martino S, Brigham GS, Higgins C, et al. Partnerships and pathways of dissemination: the NIDA-SAMHSA Blending Initiative in the Clinical Trials Network. *J Subst Abuse Treat.* 2010; 38(suppl 1):S31-S43.

Molfenter RD, McCarty D, Capoccia V, Gustafson D. Development of a multilevel framework to increase use of targeted evidence-based practices in addiction treatment clinics. *J Pub Health Front.* 2013; 2(1):11-20.

---

Molfenter T, Kim JS, Quanbeck A, Patel-Porter T, Starr S, McCarty D. Testing use of payers to facilitate evidence-based practice adoption: protocol for a cluster-randomized trial. *Implement Sci.* 2013; 8:50.

Murphy LS, Oros MT, Dorsey SG. The Baltimore Buprenorphine Initiative: understanding the role of buprenorphine in addressing heroin addiction in an urban-based community. *J Addict Nurs.* 2014; 25(1):16-25.

Quanbeck AR, Gustafson DH, Marsch LA, et al. Integrating addiction treatment into primary care using mobile health technology: protocol for an implementation research study. *Implement Sci.* 2014; 9:65.

Quanbeck A, Wheelock A, Ford JH, Pulvermacher A, Capoccia V, Gustafson D. Examining access to addiction treatment: scheduling processes and barriers. *J Subst Abuse Treat.* 2013; 44(3):343-348.

Rasyidi E, Wilkins JN, Danovitch I. Training the next generation of providers in addiction medicine. *Psychiatr Clin North Am.* 2012; 35(2):461-480.

Roosa M, Scripa JS, Zastowny TR, Ford J. Using a NIATx based local learning collaborative for performance improvement. *Eval Program Plann.* 2011; 34(4):390-398.

Rutkowski BA, Gallon S, Rawson RA et al. Improving client engagement and retention in treatment: the Los Angeles County experience. *J Subst Abuse Treat.* 2010; 39(1):78-86.

Suzuki J, Matthews ML, Brick D, et al. Implementation of a collaborative care management program with buprenorphine in primary care: a comparison between opioid-dependent patients and patients with chronic pain using opioids nonmedically. *J Opioid Manag.* 2014; 10(3):159-168.

## **STRATEGIES TO ADDRESS WORKFORCE ISSUES**

Kunins HV, Sohler NL, Giovanniello A, Thompson D, Cunningham CO. A buprenorphine education and training program for primary care residents: implementation and evaluation. *Subst Abus.* 2013;34(3):242-247.

McCarty D, Rieckmann T, Green C, Gallon S, Knudsen J. Training rural practitioners to use buprenorphine: using The Change Book to facilitate technology transfer. *J Subst Abuse Treat.* 2004; 26:203-208.

Messaadi N, Pansu A, Cohen O, Cottencin O. Pharmacists' role in the continued care of patients under opiate substitution treatment. *Therapie.* 2013; 68(6):393-400.

Rieckmann TR, Kovas A, McFarland B, Abraham A. A multi-level analysis of counselor attitudes toward the use of buprenorphine in substance abuse treatment: a multi-level modeling approach. *J Subst Abuse Treat.* 2011; 41(4):374-385.

Roose RJ, Kunins HV, Sohler NL, Elam R, Cunningham C. Nurse practitioner and physician assistant interest in prescribing buprenorphine. *J Subst Abuse Treat.* 2008; 34(4):456-459.

Sharma TR, Kablinger AS. Training general psychiatry residents to prescribe buprenorphine in treatment of patients with opioid dependence. *J Grad Med Educ.* 2012; 4(3):391.

---

## ADDITIONAL ARTICLES

This section of the bibliography contains additional articles submitted to the portal library in the weeks prior to the conference by participants, speakers and observers.

### ARTICLES SUBMITTED BY PARTICIPANTS

#### ACCESS TO BUPRENORPHINE

Clark RE, Samnaliev M, Baxter JD, Leung GY. The evidence doesn't justify steps by state Medicaid programs to restrict opioid addiction treatment with buprenorphine. *Health Aff.* 2011; 30(8):1425-1433.

Gunderson EW, Fiellen DA, Levin FR, Sullivan LE, Kleber HD. Evaluation of a combined online and in person training in the use of buprenorphine. *Subst Abus.* 2006; 27(3):39-45.

#### DIVERSION AND ABUSE

Lofwall MR, Havens JR. Inability to access buprenorphine treatment as a risk factor for using diverted buprenorphine. *Drug Alcohol Depend.* 2012; 126(3):379-383.

Lofwall MR, Martin J, Tierney M, Fatséas M, Auriacombe M, Lintzeris N. Buprenorphine diversion and misuse in outpatient practice. *J Addict Med.* 2014; 8(5):327-332.

Lofwall MR, Walsh SL. A review of buprenorphine diversion and misuse: the current evidence base and experiences from around the world. *J Addict Med.* 2014; 8(5):315-326.

#### SPECIAL POPULATIONS

Pugatch M, Knight JR, McGuinness P, Sherritt L, Levy S. A group therapy program for opioid dependent adolescents and their parents [published online ahead of print August 30, 2014]. *Subst Abus.*

### ARTICLES SUBMITTED BY SPEAKERS AND ORGANIZERS

#### IMPROVING ACCESS TO BUPRENORPHINE

Clark RE, Samnaliev M, Baxter JD, Leung GY. The evidence doesn't justify steps by state Medicaid programs to restrict opioid addiction treatment with buprenorphine. *Health Aff.* 2011; 30(8):1425-1433.

#### PHYSICIAN TRAINING

Gunderson EW, Fiellen DA, Levin FR, Sullivan LE, Kleber HD. Evaluation of a combined online and in person training in the use of buprenorphine *Subst Abus.* 2006; 27(3):39-45.

#### PREVENTING AND RESPONDING TO DIVERSION AND ABUSE

Lofwall MR, Havens JR. Inability to access buprenorphine treatment as a risk factor for using diverted buprenorphine. *Drug Alcohol Depend.* 2012; 126(3):379-383.

Lofwall MR, Martin J, Tierney M, Fatséas M, Auriacombe M, Lintzeris N. Buprenorphine diversion and misuse in outpatient practice. *J Addict Med.* 2014; 8(5):327-332.

Lofwall MR, Walsh SL. A review of buprenorphine diversion and misuse: the current evidence base and experiences from around the world. *J Addict Med.* 2014; 8(5):315-326.